

VOLATILE SPIRITS: THE HISTORICAL ANTHROPOLOGY OF ALCOHOL AND  
DRINKING IN THE CARIBBEAN

By

FREDERICK B. SMITH

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## The Game and the Goal

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**VOLATILE SPIRITS: THE HISTORICAL ARCHAEOLOGY OF ALCOHOL  
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By

Frederick H. Smith

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Chair: Barbara Dugan

Major Department: Anthropology

This dissertation explores the role of rum and other forms of alcohol in the Caribbean from the nineteenth century to the present using an interdisciplinary approach that combines historical and archaeological analyses. The evidence was collected during numerous fieldwork in Barbados between 1995 and 2000.

Rum making emerged in the Caribbean to meet the alcoholic needs of colonists who sought to escape the many maladies they encountered on the Caribbean frontier. Archaeological material from a nineteenth century distillery site in Bridgetown, Barbados also shows that alcohol played a central role in sociality. However, rum quickly became a commercial product. In the seventeenth century, merchants and sugar plantation capitalists in marginal markets on the Atlantic world, such as colonial the grounds of American ports and brought Caribbean rum into the growing market economy.

In the eighteenth century, rum penetrated northern European markets. It became a profitable commodity that implemented sugar plantation economies. Rum also proved large

markets in Africa. Many African ethnic groups valued the security of men and womenhood in an existing social and spiritual identity-based institutions. These rituals survived the violence of the middle passage and flourished in the slave societies of the Caribbean. In the domestication area of the Caribbean, alcohol became a universal substance for interactions with the ancestral world. Alcohol also provided a temporary means of escape from the extreme vicissitudes of slavery and a shield with which to challenge the dominant classes. However, excessive drinking and local contaminated rum increased the disease of many in the Caribbean and exacerbated the numerous deadly outbreaks in this unsanitary social climate.

In the nineteenth and twentieth centuries, men became a means of economic survival. European sugar land businesses and the rise of new sugar producers in the Caribbean global world super-markets and reduced the profitability of sugar making. However, Christian temperance reformers streamed into the Caribbean after slave emancipation and reduced the large criminal rum market. Despite reform efforts, alcohol continued to play a central role in Caribbean society. At the beginning of the twenty-first century, rum is a symbol of Caribbean identity.

## CHAPTER 1 INTRODUCTION

In the summer of 1996, I went to Barbados to prepare a historical archaeological field school to Baidigowen with my colleague Karl Wilson and his students from the department of history at the University of the West Indies, Cave Hill. On the morning of Sunday, July 15, Wilson called to say that construction workers were part of the city square or the "piazza" had unearthed skeletal remains while preparing the site for the expansion of a local shopping mall. The remains turned out to be human, and further investigations revealed stone burials at the site. We spent the day mapping and recording information about the cemetery. Based on the unusual nature of the graves, the cemetery's location at the periphery of town, and the presence of a mid-eighteenth century white limestone schoolhouse just adjacent to the site, we hypothesized that the site was the burial place of Baidigowen's slaves.

Throughout the day, construction workers and residents from the nearby neighborhoods interrupted our excavations and produced our work. Some mentioned the ghosts of slaves buried at the site and the mistreatment of slaves; the mischievous, and sometimes malicious, spirits of the dead. As the end of the day, we returned the skeleton with the telegrapher and began packaging it for proper storage at the University of the West Indies. However, as the crowd showed that we needed to give directions to those buried at the site and within minutes a hole of rain was produced for that purpose. The rain was joined on the ground and the pouring was punctuated by requests that the diggers "bring bones" and "bring us bones." This event was a major turning point in my academic career.



Since 1980, I have participated in archaeological investigations as a participant-observer in the Caribbean and, during these years, had the opportunity to observe the central place of rum and other forms of alcohol in Caribbean society. In 1994, I was interested enough to write a short paper on the social history of Caribbean rum for a course on Caribbean history at the University of Florida. During the excavations at the postcolonial cemetery in Bridgetown, however, I was attracted to participants' accounts that reflected and expressed various levels of alcohol-related malaise in the Caribbean, which inspired me to pursue further study.

This dissertation explores the social, political, and economic history of rum and other forms of alcohol in the Caribbean using an interdisciplinary approach that incorporates documentary, archaeological, and ethnographic evidence. Much of the material was collected during my months of field study in Barbados. As the primary source of Caribbean rum, this island deserves special emphasis within what is otherwise a pan-Caribbean study that engages across the region and seeks to provide a comprehensive overview. Although the social history of alcohol has been addressed in a variety of historical and cross-cultural settings, this is the first comprehensive study of alcohol in the Caribbean.

Caribbean researchers have a historical-economy tradition and the focus on rum taxation has provided insights into the broad trends that helped shape the Atlantic world. Anthropologist Sidney Mintz (1985) most notably popularized the economy-based approach to culture history in his study of the changing history of sugar in Europe. Other research has emphasized the impact of sugar on Atlantic ecosystems. The study of rum offers another potentialist that presents a special opportunity to highlight the Caribbean. The study of rum and other forms of alcohol, for example, provides unique points through which to view the rise and fall of slavery and colonialism, two of the most profoundly influential forces in Caribbean history. The potential is one of several that will be explored in the following chapters.

Various factors have hampered academic interest in alcohol in the Caribbean. First, the principal alcoholic beverage produced and consumed in the Caribbean is a by-product of sugar. Early sugar planters largely treated rum as a fortuitous side-product and as little a secondary product in Caribbean trade. Moreover, rum related to peripheral markets at the margins of the Atlantic world. North and South America, the Caribbean, India, and Africa imported large amounts of rum, while Europe, especially northern Europe, had relatively little exposure to rum until the late eighteenth century. In addition, rum consumption was concentrated among poorer classes. Soldiers, sailors, sailors' poor whites, and slaves were the primary consumers of rum and, despite the efforts of West Indian lobbyists, it remained the drink of common folk well into the twentieth century.

Negative western attitudes toward drinking, however, have probably been the greatest obstacle to scholarly research in alcohol studies in the Caribbean. Alcohol enhances sociability, yet drinking also has the potential to disrupt otherwise stable social structures. In order to cope with this inherent contradiction, societies have created arbitrary rules and restricted complex rules to govern drinking, which reflect the continuously feared and celebrated status of alcohol. For example, although the prophet Muhammad described heaven as a place where wine flows freely, he stressed the importance of a rational mind and urged followers of Islam to refrain from drink. Positive perceptions were at Antioch. Church officials ran churches packed with sermons about excessive drinking and sobriety (Duggan 18, 20). Because alcohol is a social lubricant with the potential to destroy social stability, the use of alcohol is often controversial. Historians Joanna Barnes and Robin Rountree (1994) argued that the emotional distance stemming from sobriety and twentieth-century temperance campaigns prompted many scholars to avoid alcohol studies and impeded the growth of the field. Overcoming the pervasive historic misunderstanding alcohol use has been a challenge for alcohol studies researchers.

Modern social scientists continue to disagree about the role of alcohol studies. College binge drinking, drunk driving, alcoholism, and other problems associated with

alcohol overshadowed the more objective value-history-oriented research. While the negative impact of alcohol on society is certainly an important facet of alcohol studies, decades of research have shown that drinking is more than simply a social act in the form of pleasant behavior. Alcohol has helped revolutionize world trade and shape the course of global politics. Drinking patterns distinguish social boundaries, reinforce group identities, and define the parameters of masculinity and femininity. Alcohol reinforces sociality, defines periods of leisure, and provides a temporary avenue of escape from various social problems. Drinking reduces personal accountability and decreases responsibility of one group from punishment. The dual nature of drink also produces a complicated dichotomy whereby alcoholism is a problem, yet alcohol has strong spiritual associations.

Explaining the impact of alcohol on different societies provides fertile ground for interdisciplinary research. Some anthropologists and social historians were quick to discuss the relatively peripheral of alcohol studies and embrace the complexities of drink. For example, anthropologist Marc Marshall (1991: 1) wrote, "The cross-cultural study of alcohol provides a classic natural experiment. A single species (*Homo sapiens*), a single drug substance (ethanol), and a great diversity of behavioral outcomes." However, alcohol studies have changed slowly. In 1976, Dwight Heath (1976: 42) identified numerous weaknesses in which anthropologists had addressed patterns of alcohol use, but believed "there can scarcely be said to exist any consistency of approach or any subdiscipline of alcohol studies." According to Heath, ethnographic studies of alcohol production, distribution, and use were "inspired by products of locally oriented research." However, anthropological interest in alcohol grew and by 1987 Heath (1987: 17) could happily claim that alcohol studies were no longer just offshoots of other research designs. In the 1970s and 80s, alcohol studies also became an important subfield within history departments. According to Flannery and Hayes (1984: 2), alcohol studies connected with the rise of social history and more closely linked the social/historical interpretation

<sup>11</sup> Distinguishing the lives and collective experiences of ordinary people.

The holistic type of inquiry that the study of alcohol as society demands has led to interdisciplinary research that often blurs the line between anthropology and history. The publication of several edited volumes on alcohol as a variety of cross-cultural and historical settings highlights the breadth of alcohol studies and the need for collaboration with colleagues in cultural, historical, psychological, economic, and health fields (Barrows and Brown 1990; Blanton and Worth 1990; de Garay and de Garay-Hernandez, Douglas 1997; Evans, Waddell, and Heath 1999; Galen Martinez 1982; Heath 2000; MacAuliffe and Calverton 1990; Marshall 1979; McDonald 1994). Alcohol studies have been strengthened by the exchange of ideas among members of the Alcohol Temperance History Group (ATHG) through its journal, *Social History of Alcohol Reviews*, and electronic listserv. The ATHG is an international group of scholars who represent a broad range of academic disciplines. Moreover, an increasing number anthropology and history departments now offer alcohol-related courses, which suggests that alcohol studies research has become a more widely recognized subfield that will continue to grow in the future.

The use of archaeological evidence in the distribution of alcohol is crucial to enhance and expand the growth of alcohol studies by firmly placing a nation the context of historical anthropology. Archaeological methods provide opportunities to explore the production, distribution, and use of alcohol in the past, and a number of archaeological studies have already addressed alcohol relatedness. For example, Heath's characterization of early ethnographic research, archaeological investigations of alcohol as frequently associated by producers of fieldwork, has had repercussions. Despite the rich body of archaeological evidence for alcohol production, distribution, and use, archaeologists have generally overlooked the subject of alcohol as society. Moreover, few archaeologists have rigorously applied historical and anthropological theories to help them explore their alcohol-related discoveries, and an overview of archaeological approaches to alcohol has never been produced. A survey of the way alcohol has been examined in major and minor liter-

to actual archaeological studies provides a foundation for constructing an archaeology of alcohol in the Caribbean.

The interdisciplinary model developed in this dissertation highlights the role of alcoholic beverages in the Caribbean and uses them as a prism through which to view the underlying reasons that helped shape the social, political, economic development of the region. The first section (chapters 1-7) explores the economic and technological history of rum and other forms of alcohol in the Caribbean. Rum making has been central to the economies of many Caribbean sugar colonies and alcohol fueled the growth of Atlantic trade. As a result, alcoholic beverages were readily available. Understanding the widespread availability of alcohol in the Caribbean provides a foundation for exploring the social history of alcohol in the region.

A second section (chapters 8-11) examines specific patterns of alcohol use among Caribbean peoples. Drawing on documentary and ethnohistorical sources, as well as archaeological theories related to alcohol use, this section identifies forces that shaped the particular drinking patterns of different social groups. The goal is to map society and the drive for variability largely ignored alcohol use in the region.

The last two sections of this study establish the historical, economic and social context for alcohol use/drinking in the Caribbean, and present an archaeological approach to the study of colonial drinking patterns. The third section of this study does this through a case study of British colonial drinking behavior as revealed in seventeenth century urban documents from Bridgetown, Barbados. Chapters 12-15 explore the role of alcohol in both Barbados and the larger British colonial world, bridging our traditional Bridgetown models in historical archaeology. Evidence from seventeenth century documents sets in the Chesapeake provides a comparative perspective that highlights different drinking patterns in different parts of the British colonial world. The interdisciplinary approach used in this study seeks a comprehensive understanding of the role of alcohol in the Caribbean and we hope with an explanation of the region and various steps of rum and rum production.

## CHAPTER 1 SEARCHING FOR THE ORIGINS OF SUGAR-CANE-BASED ALCOHOL

An enormous amount of academic scholarship has been devoted to understanding the origin and development of world sugar industries, while less, the alcohol by-product of sugar production made for sugar cane growing regions of the world. An unusual, relatively little attention there was first made in Brazil, Mexico, and the Caribbean in the early years of European colonial settlement in the tropical and sub-tropical countries. Yet the technological potential of sugar cane was exploited much earlier and some Old World societies produced fermented versions of sugar cane prior to the age of European exploration and settlement of the Americas. However, sugar cane never became the basis for an alcohol industry until the rise of New World sugar production. Identifying the challenges faced by cane's fermental production provides a foundation for understanding the various influences that developed the emergence of New World rum making.

The production of sugar cane has evolved steadily, follows the historical migrations of sugar cane. Europeans believe that sugar cane was first domesticated in New Guinea about 8,000 years ago and spread to the Pacific islands in several migrations reaching Hawaii around 600 AD (Arachwajorn and Branstetter 1988 cited in Muga 1983 79 Branstetter 1998 cited in Barnes 1984 1-11). Early European explorers recorded the presence of sugar cane in the Pacific. For example, during the westward-extraneous voyage of the world in 1492-1501, Magellan's expedition processed sugar cane at Japan. In 1772-1776, Captain Cook found sugar cane flourishing throughout the South Pacific. In Hawaii, Cook's landing party reported ascending a hill beyond the shore "which was covered in every direction with plantations of sugar cane" (Ellis 1782a 94). According to William Ellis (1782 142) account, sugar on the Cook voyage, "the sugar cane has a leaf for the largest we ever saw, and yields a great quantity of juice.

Alcohol was a featured provision on the Cook voyages to the Pacific and concerns about alcohol needs during the long trips only later starting with the Captain's log entry "beverage" as part of the stores. According to Julius Rudolph Foster (1975: 266) sustained and restricted on the Cook voyages to New Zealand in 1770-1771, these beverages were "scarcely and palatable just on from the distillation of spruce and New Zealand Tea mixed with the essence of Mahi and Mahoeau." Ellis (1913: 26, 195, 293, 303) also noted the production of spruce beer. Sugar-biscuits (Hodgkiss 1949: 233) argued that Cook attempted to make "sugar water beer" for his sailors in Hawaii but that his sailors found it "repulsive." Yet, neither Ellis nor Foster identified significant written hints for any alcoholic provisions and Dore seems to have misinterpreted their reluctance to spruce beer. Although Foster noted the use of sailmakers in the beer, it appears to have been part of the ship's import and not evidence of indigenous reliance on alcohol production among Pacific islanders. Dore's misunderstanding may reflect confusion concerning the original quote or a misinterpretation of the word "Tea." Ellis wrote that "Tea" was the indigenous Hawaiian word for sugar. However, Foster (1975: 266) clearly identified "New Zealand Tea" as the shrub *Carpenteria repens* (see also Ellis 1913 II: 128). Dore (1941: 1) probably confused *Lepidospermum repens* with *Lepidospermum* a rich source of sorbitol and glucose, both and the mixture was made from sugar cane.

Ellis continuously noted over the ships' dwindling supply of grape and alcoholic beverages consisting of rum and water. Despite his concerns, Ellis never mentioned the possibility that the ship could replace its alcohol needs from any fermented alcoholic beverage produced by the indigenous peoples of the Pacific. Neither Ellis nor Foster identified the use of sugar cane in alcohol production among the Pacific islanders. Instead Ellis (1913: II: 135) reported that in Hawaii, "sugar cane was used only as a "vegetable plant." In fact, according to Mac Inderell (1976: 383), one of the leading anthropologists to research the history of alcohol and drinking water Pacific, it is generally accepted that

Given the size of the major cultures, some known not to have had alcoholic beverages at the

name of *Coconut wine*” from the Marshall and Islands (1971: 197). Larson (1981: 361, 1994). Thus, although Pacific islands could have exploited the alcohol<sup>1</sup> potential of sugar cane, there is no evidence that they went right out to produce an alcoholic beverage. Instead, the pre-contact peoples of the Pacific islands, especially Tahitians, shared their meals and feasts with the same root filler (1972: 199-200) described “a tree [kava] a species of pepper with which they [the Tahitians] intoxicate themselves.” However, *Java is “noted for several non-alcoholic”* (Blanchard 1974: 112). The absence of an alcoholic beverage made from sugar cane at the time of European contact suggests that Java and Oranouta – contemporary-sharing meals.

From the South Pacific, sugar cane spread to India and China and it is here that we find the earliest evidence for the production of a sugar-cane-based alcohol. In his search for the origins of sugar, anthropologist Tadeusz Plescia (1983: 30) argued that the earliest date for members of sugar-cane came from Alexander the Great’s general, Nearchus, during his conquest of the Indian Ocean empire in 327 BC. Nearchus joined to Maury 329 B.C. “a river in India brings forth honey without the help of bees, from which an intoxicating drink is made through the plant/bee method.” Davis (1990: 11) interpreted the same passage: “He [Nearchus] writes also concerning the wine that they produce from, although there are no bees, and in fact that there is a fruit bearing tree from the fruit of which honey is compounded, for therefore who eat the fruit are become intoxicated.” In reality, both interpretations refer, not to sugar, but to an alcoholic beverage made from sugar cane.

There are numerous other references to the use of sugar cane as the production of alcohol in ancient India. For example, the *laws of Manu* (dating to 300 BC- 200 AD) placed restrictions on the use of alcohol, warning Hindus, including all Hindu, to drink made from sugar cane (Dargatzis and Smith: 1994). The laws state, “Three kinds of liquor should be distinguished: made from sugar, made from pressed rice, and made from honey; just as priests should not drink the rice so they should not drink any of these” (Dargatzis and Smith: 1994: 246). The *Capein Samiti* (possibly written as early as 75 AD) identified



“quite the use of the cane for wine” (Chandru Kaverana and Sharma 1996, 194-195). Yeh-Jen Wu is an Chinese scholar on Chinese wine, wrote during his travels to the Indus Valley that sugar cane was cultivated and from its juice “bright white wine” (Wittke 2006: 197-121). Fermented sugar drinks were also described in the *Artisanry of Kanchi*, [a Sanskrit text](#), which may have been written as early as the third century BC (Diner 1981: 48; Alkhalaf 1979:38).

The Muslim expansion in the 7th century spread sugar cane across the Mediterranean, yet its use as an alcoholic beverage waited. By the 800s, the sugar industry reached as far west as the island of Sicily and southern Spain confirming the saying that “sugar followed the Arabs” (Lippman 1997:239-240). The *Crusades* helped introduce sugar to Christian Europe and, by the 1300s, Crusaders discovered European sugar producers in some parts of the conquered Arab world (Hunt, 1945: 28). For almost one thousand years, until the fifteenth century, the supply of sugar to the Muslim and Christian worlds came almost exclusively from the [Levantine and Mediterranean sugar colonies](#).

There is some evidence that sugar cane was used as the production of alcohol in the Arab world. In 1300, Marco Polo (1254-1324) wrote that, in Zanzibar: “They have no grape vines, but make a sort of wine from cane root sugar, with the addition of some spicy drugs very pleasant to the taste, and having the intoxicating quality of the other.” Yet, despite the breadth of the Arab sugar industries, especially in the Levant and Mediterranean, as well as the knowledge, at least in some parts of the Arab world, that sugar cane could be used to produce alcohol, there is [no evidence of any concentrated commercial effort to advance the production of sugar cane based alcoholic beverages](#).

Several factors account for the absence of sugar cane based alcohol in the Arab world. First, although the decline of the Levantine and Mediterranean sugar industries in the nineteenth century is generally attributed to competition from the developing sugar refineries in Mexico, the Caribbean, and the Americas, research also suggests that environmental constraints, technological inefficiency, and local [harvesting techniques](#)

restrained the growth of Levantine and Mediterranean sugar production. For example, historian P. H. Galloway (1977: 112) argued that the short growing season of sugar cane in these more temperate regions prevented crops from reaching maturity. This short growing cycle reduced the amount of cane juice produced and limited sugar yields. Galloway (1977: 117) also noted that deforestation led to fuel shortages, which impeded the growth of a variety of developing industries in the Mediterranean, including sugar. Moreover, *sugar mills and presses were inefficient and "adapted from those already used around the Mediterranean to mill flour, to extract oil from olives, or to crush grapes and other fruits"* (Galloway 1977: 118).

Sugar historian Edmund Einar von Lippmann (1928) and Stuart Dunn (1949) described, in 1949, Serbian princeval official Petar Djordjević invented the *gumak* mill as a major technological innovation in the processing of sugar cane. This innovation, *they* believed, was evidence of the advanced state of Mediterranean sugar production. However, Galloway challenged the Serbian origin of the *gumak* mill and argued, instead, that the *Minervaller* mill had a seventeenth-century New World origin. Furthermore, Galloway (1977: 114) blamed weather, plagues, and the corrupt practices of the Mamluk rulers of Egypt for the inefficiency and decline of Mediterranean sugar production. Historian Eyalim Ashkenazi (1984) noted similar technological stagnation in the Levant. Ashkenazi contended that Levantine elites and rulers placed tough restrictions on private enterprise, which resulted in technological conservatism on the part of the outlying homogenous sugar planters. In short, environmental constraints, technological stagnation, and bureaucratic controls restrained the growth of the sugar industry in the Mediterranean and Levant and prevented the development of industrial structures that would have effectively turned sugar cane juice and sugar industry waste into alcohol.

The profitability of sugar also inhibited the rise of a sugar state-based alcohol industry. During the Mediterranean phase of sugar production, sugar was an expensive luxury item in both the Islamic and Christian worlds. Ashkenazi described the wide variety of

sugar produced in Egypt and Spain moving from direct-linked refined sugar to exclusive. Elsewhere, low grades of sugar-linked sugar and molasses were expensive and in high demand in European and Mediterranean markets. In fact, according to Adams, Levantine sugar producers had such difficulty meeting local demand in the fifteenth century that they were forced to import molasses from Cyprus, Sicily, and probably Spain. The limited supply and high demand for sugar and molasses kept prices high, which made it unlikely that Mediterranean sugar producers would replace profits from the lucrative sugar and molasses trades in order to produce alcohol. This argument is strengthened when we<sup>5</sup> consider attitudes toward alcohol in the Mediterranean and Europe.<sup>6</sup>

Muslim prohibitions against alcohol probably guaranteed that Mediterranean sugar producers would not use their sugar, cane juice and molasses into alcohol. The basis for Islamic prohibitions against alcohol derives from the following three passages in the Koran:

They ask you about wine and gambling. Say: "There is great sin in both, although they have some profit for men. But their harm is far greater than their profit."

(Sura II: 219) —

Baths, wine, and games of chance, while and chance, arrows, are abominations decreed by Allah. Avoid them so that you may prosper.

(Sura V: 90) —

Allah seeks to bring up morality and feared among you by means of wine and gambling, and to keep you from the remembrance of Allah and from your prayers. Will you not understand?

(Sura V: 101) —

Although Islamic prohibitions refer to the fermented juice of grapes, they applied to all forms of alcohol, or anything that associated with the ability to intoxicate and intoxication ritually with Allah. Islam not only prohibited the consumption of alcohol, but also the production and sale of alcoholic beverages. Despite other, more positive references to wine in the Koran, as well as in the poetic glorification of Omar Khayyam,<sup>7</sup> (Sura 90), the prohibitions against alcohol remained strong in the Orthodox Muslim world. For example, in the eleventh century, Caliph al-Hakim ordered that grapes all must and grape vineyards that could be used to produce wine (Ibn al-Jayy 151). Ironically, Mesopotamian wine is the place of beer and wine 10,000-12,000 years ago and some archaeologists believe the

Animal for alcohol was the aspen for the Moslems revolution (Dietrichson et al. 1993; Katz and Varga 1986; Sadler, McGovern, and Michel 1990; Katz and Mlynar 1989). Beer and what had been simple beverages in Mesopotamia were the Roman aspen around 300 BC and they were also widely used in the eastern Mediterranean environment. Yet, despite the long history of alcohol use in the region, prehistoric records the transportation production and sale of alcohol after the rise of cities demanded Mediterranean aspen planters from Mesopotamia. These ancient aspen wine, pure or adulterated with alcohol. Further, if alcohol was habitually produced and consumed in the Islamic world on any large scale, the beverage of choice would have likely been traditional grain beer or the commercial grape wine. Thus, according to Khayyat (1981: 83), "Drink wine, that is life eternal."

Alcoholic beverages made from aspen were would have started difficulty processing European markets. Medieval Christian Europe developed a taste for grape wine. As early as the Hellenistic period (3400-1100 BC), wine was the common drink in Greece (Larson 1989: 94-103; Wynne 1983: 164). Phoenicians collected the wine in the region of Mesopotamia to the west-coast BC and the Greek wine trade reached the Upper Silesia valley and the Sea of Paphlagonia for same period (Simons 1954: 181). The market of Maron/Patara City (224-195 BC) revealed that viticulture was well established in Italy by the second-century BC and Italian wine was sought throughout the Roman Empire. During the Roman Empire AD the wine spread through Gaul as far north as the Rhine River and Britain. The aspen Christians made the earliest reference to wine in Hungary in 343 AD. However, viticulture may have begun in the region of Great Hungary earlier (Larson 1989: 17). In the first century AD, Dioscorus' *Serapion* wrote,

The Gauls are remarkably addicted to the use of wine and fill themselves with the wine which is brought into their country by merchants, drinking it unmixed and most they partake of this drink without moderation by reason of their craving for it when they are drunken fall into a stupor or state of madness.

(cited as Simons 1954: 124)

The Mediterranean and northern European wine trade also led the demand for wine in England before the Roman conquest and it is even possible that the Romans introduced viticulture to England in the first century A.D. (Lewis 1994: 118).

‘Why was wine so popular in Europe?’ clearly has to do with marketing strategies of Italian merchants. What historian Tim Unwin argued that the increased demand for wine in Italy in the first century BC was due to the increasing population of Roman towns. Unwin provided this explanation: such from a peasant style agrarian subsistence that not local wine made an increasingly lucrative slave labour and the commercial export of wine. In fact, Italian wine merchants acquired slaves or land using profits from the wine trade. The Italian market for slaves was soon saturated – which resulted in the decline of the Italian wine trade to slave markets in western and northern Europe. Increased production of wine in southern France and the development of the Spanish viticulture further strengthened the Italian wine traders’ western and northern Europe. Italian exports continued to decline in the first century BC as Italian viticulturists struggled to meet the local slave-labour demands of the growing urban populations in Roman towns. As wine became the dominant drink of all classes in Roman towns – what scholar Paul de Certeau changed variation of wine to the market was more profitable than producing wine for specifically for the wealthy. The demand for wine grew so rapidly in Italy that by the end of the first century BC, Italians were forced to export wine from Gaul and Spain (Lewis 1994: 115–117).

Urban viticulture in Europe restricted after the fall of the western empire but began to expand again between 800 and 1100. By 1300 the largest cities in Europe included Paris, Milan, Florence, and Venice and urban centres were beginning to develop in northern Europe. What became the common drink of the masses as the wine growing regions of western Europe, especially in France, Spain and Italy. Southern European wine producers faced the challenge of opening potentially huge markets in the newly emerging towns and cities in northern Europe, such as London and Flanders, where the wine did not grow and where the wine trade had been relatively small. For the most part, the markets in

northern Europe drink beverages with relatively low alcohol contents, such as beer and ale. For example, in 1843, Tucker noted that the Germans prefer

drink a liquid made of barley or other grain which is fermented to produce a certain amount of wine. These who drink agree the drink in the climate also they want. They food is plain — cold fruit, drink pure and refined milk. They satisfy their hunger with many different kinds of appetizers. But they do not share the same satisfaction in their drinking their drink. If you satiate them with goodness by giving them with a most drink as they do not, they will be as easily conquered by the heating weakness in food of cold.

(quoted in Greene 1991: 146)

Wine was also considered a luxury replacement in northern Europe and an important substitute for potentially harmful water.

Wine, with its higher alcohol content, was an expensive novelty. In the emerging merchant economies of medieval Europe, beer and ale were the drink of common folk, while wine became the drink of the nobility and new merchant elite. Wine was a symbol of wealth and high social status throughout northern Europe. The wine trade in northern Europe flourished in the late medieval period and eventually found more of a mass market. This was particularly true of the wine trade between Germany and England which began in the late 14th century (Greene 1991: 72–73). In the last decade of the fourteenth century, well over 20 million gallons of wine were annually exported by England from German ports. Worth roughly £200,000, the wine trade was a lucrative business and one that German wine merchants were eager to control (Lewin 1990: 158; Greene 1991).

Medieval Europe also emerged as the age of wine in medieval Europe. The cult of Dionysus flourished in Greece in the sixth century BC and found wine synonymous to a spiritual level. Dionysian philosophy in Greece developed into Bacchante philosophy in second century BC in Rome. Dionysus and Bacchante symbolically linked wine to the ecstatic and fertility and, thus, to the world of the gods (Lewin 1991: 85–88). Medieval Christianity adopted much of the Greek-Roman wine symbolism and the New Testament is loaded with spiritual references to wine adopted from Dionysus and Bacchante philosophy. For example, Jesus' first miracle was to turn water into wine at a wedding in Cana. Similar accomplishments were attributed to Dionysus in ancient Greece. In contrast

to the Islamic prohibition, *qanun* in medieval Christian Europe was an original part of |  
*qanun*ality. Consuming wine in the East had helped Europe's path to God. When merchants  
 explored Christian wine symbolism in order to expedite trade (Jensen 1993: 140–142),

London began spurring the European preconception with wine was the belief in its  
 medicinal qualities. In the *Port Testament*, Port recommended wine as a cure for stomach  
 ailments (Lefebvre/1993). Colic (180–281 AD) promoted wine as a treatment for a wide  
 range of physical disorders. In fact, Colic's philosophy shaped the medieval European diet  
 and, according to food historian Rachel Laudan (2008), one of the basic assumptions about  
 health “involved maintaining a proper equilibrium of bodily fluids by using a carefully  
 balanced diet.” When hypoxemia was named after the Greek physician, was believed to  
 counteract cold and dry forces (Laudan 2008: 79). Avicenna de Villanova's (1210–1311)'s  
*Libro de Vita* also “firmly established the medicinal use of wine in Europe during the late  
 Middle Ages” (Jensen 1993: 179). In particular, Villanova was deemed well-versed guard for the  
 blood and helped a whole physician (Laudan 2008: 79). The names given distilled wine,  
 including *aque rose* and *aque de vita* (water of life) highlight European beliefs about  
 wine's medicinal qualities. Modern medical research continues to identify links between  
 the moderate use of wine and good health.

The technological inefficiency of Arab wine production, Muslim prohibitions  
 against alcohol, and the profitability of wine continued to impede the development of wine-  
 based distilled industries in the Islamdoms. The marketing strategies of western  
 European merchants helped make wine a preferred drink of the masses in Europe. These  
 west merchants probably enhanced their trade by monopolizing wine's symbolic links to  
 wealth, spirituality, and healing. By the end of the medieval period, wine was central to the  
 European economy and most towns were supplying wine to emerging urban centers in  
 western Europe. The wine trade also generated government revenues, which helped  
 finance kingdoms throughout medieval Europe and, thus, ensured the protection of the  
 wine industry. Had a wine-based alcohol been produced in the Middle East, it

would have led to increased demand, especially competition from a grape wine made that had converted disparate parts of Europe were before the Roman Empire

It was during the more turbulent last-Middle Ages in Europe that the art of alcohol distillation developed. The emergence of alcohol distillation is not entirely clear and researchers identified several cases. For example, using recovered archaeological evidence and ethnographic evidence from tribal groups in Northern India, P. B. Allchin (1979) argued that historians have overlooked several references to distillation, which could indicate the practice in India as early as 1000 BC. Allchin discovered pottery evidence of distilling, sometimes archaeological sites in Northwestern India and Pakistan dating to a period between 1500 BC and 1500 AD and noted that the shape of the artifacts were similar to "simple" distilling apparatus that have been found among contemporary tribal groups in the region (Allchin 1979:21-22). He, Allchin also noted that a contextual analysis of ancient historical texts, archaeological excavations, ethnographic studies, and experimental archaeology and distillation technology (in parentheses) For example, the Sanskrit word *arak* (*araka*) is thought to be associated with the manufacture of alcohol. Allchin believed that *arak* is a metaphor for the snake-like pipe of ancient distillation from which the distillate ran into the receiver. Allchin (1979:24) wrote, "India appears to present evidence to have been the first culture to exploit widespread distillation of alcohol for human consumption, and it may well be that the art of distillation was India's gift to the world." If Allchin's theory is correct, then the art of distillation developed as a response with the earliest references to the use of sugar cane in the production of alcohol.

Other evidence suggests that distillation in the Mediterranean and Europe developed out of alchemy where the original purpose was not the extraction of alcohol. For example, the *Chrysopoeia* (*Chrysopoeia*) is evidence on gold/aluminum alloys at the beginning of the Christian era, included the earliest known illustrations of distilling apparatus (Manderwood 1933:10). In the third century AD, Alexander of Aphrodisias described a distillation apparatus to extract fruit wine (Manderwood 1933:10). According to medieval historians





A.J.W. Underwood (2003,36) the art of distillation was probably greatly advanced by a group of Hellenic Greek philosophers practicing alchemy in Alexandria in the first century A.D. This group practiced distilling for medicines and much of their work was steeped in mysticism. For example, among their many contributions was a recipe for "living water," an elixir of life generated from distilled vapors collected on Mount Olympus, sulfur, and mercury. Once distilled the liquid was, joined with the blood of a stallion and golden winged youths captured near the coasts of Mount Lebanon (Underwood, 2003,36-38). After the fall of Alexandria, the art of distillation was transferred to the Islamic world and England soon became a center of scientific thought. A treatise on alchemy, probably written in England between the ninth and eleventh centuries, contained writings about distillation and descriptions of alchemists that reflected the earlier Hellenic Greek tradition. The Arab world advanced the art of distillation and consistently produced rose water for medical purposes (Underwood, 2003,37).

Crescent Internationalism deriving from the Arabs and introduced the art to Europe. According Underwood, the famous medical school in Salerno, near Naples, probably had the greatest influence on distillation in Europe and was responsible for advancing the practice out of alchemical traditions. When the Arabs learned of distillation from India and applying the Greek and Arab methods to experiments, Underwood (2003,38) stated that it was in Italy that "alcohol vapors of wine were most probably discovered at sometime between A.D. 1000 and 1050." The earliest reference to distilled alcohol was twelfth century manuscript Magnum Curia, which described the process for distilling wine. Avicenna de Villanova (1250-1312), at the famous Montpellier medical school, improved the art of alcohol distillation and was the first to apply the retort vapor route to distilled wine. Around 1300, Raymond Lull introduced the art of alcohol distillation to England (Underwood, 2003,38-40).

In the late Middle Ages, northern Europe was becoming industrialized and underwent innovation of spirit distillation. The rebirth made of northern Europe was an important

medium for the production of beverages with high alcohol content. Also, because the vine did not grow in the cold climates of northern Europe, northern Europeans were forced to import expensive wine from southern Europe and the Mediterranean. Distillation offered northern Europeans an opportunity to distill beverages with high-alcohol content from cheaper varieties of imported water, as well as from local grains.

The Dutch embraced the art of alcohol distillation. The Netherlands became the main market for foreign wines from southern Europe and Dutch merchants and distillers produced brandy as France. In fact, the Dutch were so central to the distilling industry that the word for “brandy” derives from the Dutch word for brandy “brant, wijn.” By the early nineteenth century, Dutch distilling was often pointed out as pathological (Chabert 1975 cited in Schama 1987: 189). Distillation ceased in Germany 1807–1809, in 1811, there was still distillation in Amsterdam alone, or one for every two hundred inhabitants (Schama 1987: 184). Urrus (1981: 216–217) identified four reasons for the particular interest in brandy in the Netherlands. First, there was a demand for alcohol in the burgeoning tavern culture of northern Europe and the Dutch were already well established wine drinkers. Second, the prohibition of spirits was laxer after the Dutch revolt (1567) left a gap in the alcohol market. Third, the Dutch—who were early merchant-seafarers, had ready money available for liquid investment. Fourth, the water trade links of the Dutch allowed them to trade for such things as copper from Sweden, which was necessary for the construction of stills.

Historian John McCook (1991, 1994) argued that the high cost of distilled spirits hindered the early growth of European distilling industries. Early stills were small and could not achieve consistent yields. In addition, technological stagnation slowed the geographical spread of alcohol distillation across northern Europe. Early alcohol taxation affected distilling operations by generating the need and efficient modernization of alcohol. One of the most important technological innovations was the stillwater trap that water-cooling expedited the condensation of alcohol. Although the use of cold water to speed the process of condensation probably occurred in an earlier era of distilling, Lally and Williams

popularized the technique of using cold water instead of steam. In the most dramatic example, the water-cooled worm was introduced – which speeded the condensation process resulting in the more efficient manufacture of alcohol (Underwood 1995:46). The water-cooled worm, a coil running from the still head through a bath of cold water and into the receiver, was first illustrated in Berqueret's *De la distillation* of 1580 (Underwood 1995:43). In the early seventeenth century, distillers began the first serious experiments with fractional distilling, a slow distilling process based on the discovery that differences in the boiling points of pure liquid liquids could be used to remove unwanted impurities from the distillate (Underwood 1995:50).

Another important development when distillers began to experiment with different ingredients. The art of alcohol distillation originally concentrated the extraction of a single alcohol from wine, but distillers soon began to experiment with new ingredients. For example, grain distillation probably began as the forerunner of whiskey-making. However, the distillation of grain created new problems. In the nineteenth century, the British government discouraged grain distillation because it feared rising food prices (Fish 1996: cited in Fries 1991:237). McCook (1991:200) [argued that the high prices of grain and the government's prohibition, greatly hampered growth of early distilleries in America](#). According to McCook, the version of European distilling techniques had to wait until the 1830s when the rise of Pure World sugar-making, and subsequent rise of sugar refining in Europe, provided distillers with cheap and abundant syrup, the molasses-like by-product of sugar refining.

Other factors also hindered the use of distilling. The high initial cost of distilling equipment probably prevented many from entering the trade. In addition, early distilleries may have faced opposition from the church, which often considered their experimental work with distillation a form of sorcery and witchcraft. Moreover, [distillers, which included "a mixture of white and colored" farmers, began to produce whiskey, rum, and gin in response to the prohibition of distillers](#) (Underwood 1995:48). Physicians and apothecaries



from Alexandria, which appears to be a composite of Arabic, the medieval tale by product of sugar refining; otherwise known as *asprag*. The distillation of *asprag* – although not really in a sugar cane-growing region of the world – could be interpreted as an early form of rum.

At the very least, distillation in Renaissance Europe recognized the distillable potential of sugar and sugar by products. Both Gansser and Binswanger describe the use of sugar in such compounds to produce more potent medicines, and Gansser even described the distillation of *asprag*. There are also two remaining uncertainties lacking pages and the development of distillation in medieval Europe. First, the earliest experiments with alcohol distillation occurred within medical schools in Salerno at the beginning of the Mediterranean sugar industry in the late 18th century. *However, the English word “distilled” derives from the word “distillare” a derivation of “distillare” the root word for “distill” and “distillation” derived from the Latin language where the word “distillare” translates to “to drip down” (Gervase) (Mills 1983: 115).* Thus, a linguistic connection hints at a certain link between sugar and early distillation practices in the Mediterranean and medieval Europe. Yet, despite the presence of Mediterranean sugar and discovery of distillation in Europe in the late Middle Ages, there was no commercial production of an alcoholic beverage based solely on sugar cane juice or sugar cane by products. The price of imported sugar and molasses was simply too high. Any sugar cane based alcohol distillation was made in Europe at the time were produced on a small scale for medicinal, rather than commercial reasons.

In France, in 1544, Louis XII permitted the vineyard manufacturers’ guild to distill spirituous, in 1582, Francis I encouraged the same among French winehouse producers (Ulrich 1981: 256). By the mid-seventeenth century, French distillers organized themselves into a separate guild and alcohol wine distillation soon became a beverage of some ground not-Underwood (1833: 62). Similarly, in England, in the early seventeenth century, Charles I granted the Wonderful Company of Distillers a distilling monopoly for 21 years (Miller

around London and Westminster (Gosse 1951:26, Winny 1976:12). By the end of the nineteenth century, the dominance of wine, grain, and cyprus had become a lucrative commercial enterprise in Europe.

In the middle of the fifteenth century, the production of sugar shifted to the Atlantic islands off the West African coast. Spanish and Portuguese seafarers, with help from Italian merchants and sugar producers, transferred the agricultural technology and knowledge to produce sugar in the Atlantic islands. The main islands included Madeira, the Canaries, and São Tomé. Madeira, under Portuguese rule, was the earliest and most successful of the Atlantic sugar islands and by the late fifteenth century, was "the largest single producer of sugar in the western world" (Schwartz 1985:8). According to historian Stuart Schwartz (Schwartz, 1985:8), Italian sugar producers greatly influenced the development and structure of the Atlantic island sugar industries providing "the know-how in the chain that transferred the techniques, estate management, and commercial organization of sugar from the eastern and western Mediterranean world to beyond the pillars of Hercules to the Atlantic basin." Sugar producers in the Spanish Canaries began exporting sugar as early as 1486 and producers in São Tomé were also producing sugar in the seventeenth century (Dyckman 1956, Fernandez Arce 1982, Mota 1984:204-205). Yet, despite the presence of sugar, the knowledge of alcohol distillation, and the growing urban populations of metropolitan countries in Europe, there is no strong evidence for the commercial or even local production of alcohol from sugar across the Portuguese and Spanish Atlantic islands in the fifteenth and sixteenth centuries. For example, there was distilling equipment listed in the plantation inventory of Canary Island sugar plantor Cardinal Geraldino Cardillo in 1527 (Schwartz 1985:11).

Many of the same factors hindering the production of alcoholic beverages from sugar exist in the Madeira region. One obstacle to the development of this industry is the Atlantic islands. When merchants transported to metropolitan lands by sailing, grain and other products of wine, sugar was still a profitable luxury item and, thus, the focus of

**Atlantic island production:** The high demand for even low quality sugar and molasses in Europe reduced the amount of by-product available for the production of alcohol. Also, Indian medicinal influences in the Atlantic islands meant that sugar production relied on the more sophisticated technology of Mediterranean sugar producers. Moreover, Christian missionaries and colonial rulers also started to health managed Europeans to produce and cook grape wine. Grapes found here and elsewhere were also readily available to the masses in western Europe. In addition, the wine-gang distilled spirits industry in Europe still primarily the domain of the church, physicians, and apothecaries, focused on the production of brandy from the distillation of cheap western European wine.

Within a century, competition from Brazil and the Spanish Caribbean reduced the profitability of Atlantic island sugar. At the same time, the expansion of the Christian Empire into the eastern Mediterranean left a void in the important status the military once gave from Cairo/Jerusalem (FPH 188). As a result, many Atlantic island planters abandoned wine-making for rum-making. In fact, Madeira, the strongest of the Atlantic island sugar producers, began making wine in the mid sixteenth century. Thus, even though sugar was an important luxury item in Europe and sugar by-products could have been distilled into alcohol, Spanish-Portuguese and Indian merchants still perceived wine to be the more profitable industry.

Many scientists recognized the alcoholic potential of sugar cane prior to the settlement of the New World. However, the high cost of sugar, sufficient nature of Old World sugar production, Islamic prohibition, Christian spirituality, and widespread availability of other types of alcoholic beverages inhibited the production of commercial sugar cane based alcohol beverages. However, the large-scale sugar plantation sector of the New World offered a whole opportunity to explore the alcoholic potential of sugar cane.

## CHAPTER 3 THE EMERGENCE OF CARIBBEAN RUM

Donal O'Donoghue explored the alcoholic potential of sugar cane, but the commercial production of rum began in the Americas. The emergence of Caribbean rum industries in the seventeenth century was linked by coincidence, almost by accident, to rum's origins as the foremost spirit of the Atlantic world. Separated from their traditional alcoholic beverages – Pampas and Africa in the Caribbean searched for local alternatives and produced fermented and distilled varieties of sugar cane juice to help fill the alcoholic void. Rum came to the metropolitan markets – destined for alcohol at a period when Caribbean colonization was increasing the frequency of long-distance overseas trade. Early rum's rise from production highlights the efficient economic strategies of New World sugar planters and their attempts to replicate or local alcohol markets.

Rum is the possible alcoholic beverage obtained by distilling sugar cane juice and the waste products of sugar milling. This rum is made in sugar cane growing regions of the world, but the name has also been applied to sugar cane based alcoholic beverages made in other sugar cane growing regions. For example, New Englanders, who distilled molasses purchased from the Caribbean sugar islands, also called their spirit rum. To a lesser extent, Europeans, who distilled syrup, the waste products of molting Italian sugar refineries, also applied the name rum to their product.

Numerous terms have been used for alcoholic beverages made from sugar cane. *Cachaça* is the most common name for distilled alcohol made from sugar cane in Brazil, but Douglas Falkenstein-Marco Sauer-Mayer (1996) has identified well over 100 others. In the French Caribbean, *rafle*, *rou de vie de canne* and *chacha* all refer to alcohol made from sugar cane. In the Spanish colonies, *aguardiente de caña* and *chaguarite* have been



vast. All three nations distilled sugar cane-based alcoholic beverages in the early British-Caribbean and the same half-dozen transformed the French as guillem, the Dutch as jenever, and the Spanish as Kahlolerañ.

Rum became the most common name for a distilled sugar cane-based alcoholic beverage outside of Brazil. It originated in the British Caribbean in the seventeenth century and derived from the English word "rumbullion." In 1684, John Selwans, an early revolutionary Barbadian and the father of Anglo-Dutch sugar planter Constant Selwans, was at the wealthiest and most politically powerful sugar plantation in Barbados (see Smith 1981), made the rum, and possibly only, otherwise lacking rum and rumbullion. Selwans (cited in Barrow 1985: 40) wrote, "the chief's finding they make in the English Rumbullion, also Kall, Drack, and this is made of sugar-cane distilled in four bottles and terrible liquor." Rumbullion was a word commonly used in Grenada, England to mean "a great tumult" and its popularity reflect the large number of West Country (English who settled Barbados in the early seventeenth century (Davis 1985: 76-81). By the early 1680s rumbullion was christened rum. Although an interesting coincidence, it is unlikely that the word rum was taken from the last syllable of the Latin word *rumbullion* (Compton 1988: 142; Kervick 1986: 11; MacLeod 1984: 161; Paul 1983: 4). Planters on the French and Spanish Caribbean adopted rum as the name for a distilled sugar cane-based alcoholic beverage in the same and not vice respectively.

What were the first New World rum producers and how did the industry develop? Historians have speculated about the origins of New World rum making and what sources that it emerged immediately alongside sugar production. For example, Brazil historian Brian Selwans (1985: 81-82) has suggested that small Brazilian sugar plantations were producing rum as early as 1587. Johny Meis (1983: 55) estimated that sugar planters in the Spanish Caribbean were distilling rum in the early seventeenth century. Looking closer at the origins of rum-making reveals a strong sense of socioeconomic pride and some rum was steeped in the socioeconomic spirit. For example, British-Caribbean historian Gerald Davis

(1492-96) a cane "factory was wholly unknown to Englishmen and its manufacture was established if not discovered in Barbados." In contrast, French historian Alexis Henri de Laupa (1991: 17) has argued that *l'industrie sucrière* was the birthplace of capitalism. Much of the confusion surrounding the origin of New World cane-making stems from the gradual evolution of cane prototypes, fermented sugar cane-based alcoholic beverages that were produced on a small scale in the early years of colonization, and from the almost parallel movement cane-planting in the different parts of the Americas in the early seventeenth century.

Christopher Columbus carried sugar cane to the Americas on his second voyage in 1493. According to historian Mervyn Dainton (1988), a sugar processing plant was established in Hispaniola in 1500 and commercial sugar production was well under way by 1528. In the early seventeenth century, the Spanish Caribbean sugar planters followed the model of capital investment, long distance trade, and slave labor that had developed in the Canary Islands. By 1504, sugar production appeared in New Spain (Mexico). The Portuguese pursued a similar path in Brazil and exported sugar to Lisbon in commercial quantities as early as 1526, though the sugar industry may have been established as early as the 1510s (Mora 1983: 35; Schwartz 1985: 861-862). By the end of the seventeenth century, Britain, France, Holland, and Denmark all had colonies in the Caribbean, producing sugar for an ever-increasing European demand.

The confusion arises in the Americas in the use of sugar cane in the production of an alcoholic beverage in Spanish Santo Domingo. In 1550, Spanish Dominican friar Bartolomé de Las Casas, describing the period 1511-1550, wrote of the African slaves:

My lord never saw any sign of drink, but oranges. They took to that food better than to their native food, but when they brought in the mills, the work and the great sugar concentrations they drank around each day and others upon others that they brought their misery by drinking the waste and from there greatly attacked the Spaniards.

(Las Casas 1976: 238)

Las Casas' statement has major implications for understanding the development of New World rum industries. First, there is nothing to indicate that the "concoction" Las Casas

alcohol was distilled. Considering the relatively new art of distillation and the absence of references to distillation in a second-century Saxon Domesday, the evidence suggests that the “concoction” was a fermented rather than distilled beverage. Second, there is no name given to the “concoction” implying that no name had yet been devised for an alcohol made from sugar cane juice. That is, despite the variety of names used to a partly fermented and distilled product in Europe in the thirteenth century, there was no name for an alcoholic beverage made from sugar cane juice. The absence of a name suggests that the “concoction” was nonalcoholic. Third, the use of the “concoction” was apparently confined to churches rather than Spanish colonists in the colonisation Las Casas ignored its effect on the Spanish population. It is possible that, if only direct distillation, “they” produced it on a small scale for their own consumption.

The sugar industry in thirteenth century Saxon/Domesday struggled and eventually failed when Henry (Ruler 1173). Small mills produced some molasses for local consumption, but there is no evidence that the molasses from these small mills was distilled into alcohol. In fact, it appears that Spanish colonists had little interest in the by-products of sugar production. In 1335 Gaspar de Guadalupe y Valdes (died in Cuman, Wales) and Wiggle (1334) wrote, “The ships that come out from Spanish ports loaded with sugar of fine quality and the distillings and syrup that are wasted on them reflect no losses many might make another great province rich.” You have to read references to distillation, still known as *destilacion* in early sixteenth-century documents to suggest distillation of sugar cane juice or the waste products of sugar making. The rise of thirteenth century mills and thirteenth century facilitated the decline of the Spanish colonial sugar industries and subsequent use of the Spanish Colonists after the discovery of gold in Mexico and Peru further disrupted Spanish colonial sugar production.

The first sugar business was created in New Spain in 1504 and sugar production quickly spread. However, the rise of new sugar cane-growing regions in New Spain threatened to seriously destroy the struggling Spanish Colonial economies. Other than early

and later, sugar represented the Spanish Caribbean's only significant export. In 1540 King Carlos V placed restrictions on "native" sugar production in New Spain, closed new factories, sugar plantations, and prohibited harvesting of new sugar-bushes in order to protect Spanish-Caribbean sugar makers (Zavala 1984: 35). Yet, despite these efforts, Spanish-Caribbean sugar production languished until the nineteenth century.

Rum making may have developed in the sugar cane growing regions of New Spain in the sixteenth century. In 1560 a request was made to the emperor of the growing demand of Tlaxcala that the sale of wine made from sugar cane juice be prohibited because it was believed to cause "much death, illness and other harm" to the Indians (Zavala 1984: 400-401). However, the generic description of a "wine made from sugar cane juice" suggests that this was not an uncommon beverage without a specific name. In 1605, Isidoro Rodríguez (Zavala 1984: 401-02), a resident of Antigua, was granted permission to channel river water to his sugar cane fields as long as the sugar cane juice was not used to make "ponche." The term *ponche* is the first specific name for an alcoholic beverage made from sugar cane, preserved in the regional variations of this name scattered throughout the Americas. *Añejo* was a fermented variety of sugar cane juice that was probably only produced on a small scale for regional consumption. In fact, nothing in these two early references indicates distilling. However, in 1621 officials in New Spain specifically prohibited the production of *añejo* with an *alembic* and, in 1625, the *Virrey de Carolina* (Zavala 1984: 401) ordered that anyone distilling *aguardiente* (*juice*) would be whipped.

In the seventeenth century, sugar cane juice and by-products were being used in the production of alcohol in other parts of the Spanish Empire. For example, in 1646, locally made rum-composed with Spanish wine and honey in Havana (Clausen 1988: 82). In 1658, the residents of Santa Fe in New Granada complained about the harmful social impact of a new beverage "equivalent to wine made from sweet sugar cane juice" (Morris-Treuer 1988: 176). Sugar production also began in Peru and Venezuela with initial attempts

century and sugar planters there may have begun processing orange and dehydrating apendurcas de cana soon thereafter (Hawthorn 1951:64-65).

Brazil developed a highly profitable sugar industry in the sixteenth century. According to Schwartz, by 1570 the sugar industry was firmly established in northeastern Brazil. By 1600, Pernambuco dominated the field and was the leading sugar-producing area in Brazil (*Colonos do Sertão* 1987:158-174). After the Dutch conquest of Pernambuco in the 1650s, Bahia became the leading sugar-producing region in Brazil and it remained the major source for sugar throughout the eighteenth century (Schwartz 1983:391).

Brazilian planters may have distilled sugar cane juice and the by-products of sugar making in the sixteenth century. Some time between 1535 and 1558, João Manoel, a well known Portuguese poet, wrote "*Carta V. A. Antônio Pereira*" in which he used the term *cachaça* (Eliás 1982:11-95). Antônio Pereira was an early colonial governor in Brazil as well as the brother of João de Manoel. Brazilian scholars accept this passage as the earliest reference to *cachaça*, the distilled sugar cane-based alcoholic beverage (Cavalcade 1962:158-159; Bider Mann 1981:23). However, there is little evidence for the production of alcohol in sixteenth-century Brazil. In 1687, *Colonos do Sertão do Sertão* (1887:158-174) identified numerous large sugar factories and 17 smaller "*cruzeiros de açúcar*" or the *Recuraterys*. Although Schwartz (1983:11-12) has suggested that "*cruzeiros de cruzeiros de açúcar*" produced alcohol, it is not clear whether they produced alcohol or merely molasses for the local population. Further, *Colonos do Sertão* is a detailed account of the Brazilian sugar industry made in specific reference to alcohol production in the sixteenth century sugar plantations. This volume also mentions of alcohol or trade necessary for distillation in the extensive sixteenth century records of the large *Sacagipe* plantation, one of the most productive sugar factories in the Recuraterias. Distilleries are not listed among the utensils of *Engenho Sacagipe* and the earliest reference to an "*alambique*" at *Engenho Sacagipe* appears

in 1620 (Munizillo 1956:492). Thus, if cachape was produced or found in the sixteenth century, the industry was small and limited to meeting the demands of the local population.

The earliest reference to the production of alcohol from sugar cane in Brazil may be in 1622-1623 when agaveflowers were given to the slaves at Capanga Surupe (Munizillo 1956:50). This drink was reported again in 1625-1626 (Munizillo 1956:497). This agaveflower, lacking the distilling modifier "de caña," was also used as a generalised term for Portuguese brandy and was also sometimes applied to various other spirits. For example, Portuguese brandy in West Central Africa applied the term agaveflower to alcohol made from honey and fruit (Curtis 1986:12). This term in general may also apply to the 1615 reference to agaveflowers in New Spain. By the mid seventeenth century, however, Brazil as sugar plantations clearly developing cachape. In 1666, Portuguese officials already considered it such a threat to the social and economic stability of Brazil that they attempted to ban its production (Selimovic 1983:31 & 12). The ban was apparently never implemented, probably because Brazilian cachape had already found a strong market in West Central Africa (Curtis 1986).

In the late sixteenth and early seventeenth century, Spanish colonists in New Spain and the Caribbean and Portuguese colonists in Brazil experimented with sugar cane-based alcohol. Due to the independent nature of sugar making in these two regions, it is likely that early colonisers in the production of sugar cane based alcoholic beverages reflect parallel developments rather than the sharing of knowledge between Spanish and Portuguese colonies. Moreover, in the fifteenth and sixteenth centuries, wordshouses on the Spanish Canaries and Portuguese Madeira were making distilled wine and brandy. Experiments with sugar cane based alcoholic beverages in New Spain, the Spanish Caribbean, and Brazil may reflect the influence of these early distillers who migrated from the Spanish Canaries and Portuguese Madeira to the respective colonies in the Americas. It is also possible that knowledge about the alcoholic potential of sugarcane flowed directly from the

migration of sugar plantations from the Spanish Caribbean and Portuguese Madagascars to the Spanish and Portuguese sugar cane growing regions in the New World.

In the seventeenth century, the sugar industry spread to the recently settled colonies of the British and French Caribbean. Dutch merchants and sugar planters in Pernambuco were an important element. Richard Ligon, an English Royalist who fled to the Caribbean and lived in Barbados between 1647 and 1650, wrote:

*At the time we landed on this Island, which was in the beginning of September, 1647, we were welcomed, partly by those Planters we found there, and partly by our own observations, that the great work of Sugar making, was formerly practised by the Indians and there. Some of the most industrious men, having gotten their first Plantations (Pernambuco) a place in Brazil, and made trial of them in the Barbadoes.*

Ligon (1671: 85)

James Boldy and James Dunn are often cited as the planters who first brought sugar cane and the knowledge of how to produce sugar to Barbados from Pernambuco in the early 1640s (Dunn 1972: 616ff; Ligon 1671: 24, 85-86).

The Portuguese migration of Pernambuco to the Holland and São arrived the Dutch West India Company's direct access to New World sugar. In order to capture the Company capitalised on the shipping needs of British sugar planters in Barbados and French sugar planters in Martinique. This foreign-trade strategy benefited Caribbean sugar planters who, without the Dutch, relied on limited and unreliable western traders and merchants. The Dutch middleman strategy was successful. However, in the mid-to-late seventeenth century, British and French mercantile activity expanded and, as a result, Britain and France began to restore monopoly claims to the Caribbean sugar trade. The British Navigation Acts of the 1660s and 60s and the rise of French sugarier Jean Baptiste Colbert's late seventeenth century mercantilist policies reflect efforts to wrestle the sugar trade from Dutch West India Company interlopers.

Dutch migration from Pernambuco, with support from the Dutch West India Company, also established sugar plantations in the struggling islands of the Lesser Antilles and helped expand sugar production in the British and French territories. French

notary Pierre Jean Baptiste de Tonné, who lived in Martinique in the 1640s and 50s, believed that the development of Martinique's sugar industry was due to the arrival of Dutch refugees from Pernambuco. According to de Tonné, "since the arrival of the refugees from Brazil, some French and some Dutch sugar refiners in Martinique well-known established themselves" (de Tonné 1667: 467-468-469). In 1654, when the Portuguese finally regained Pernambuco, a Dutch ship with citizens from the Netherlands and Jews was forced to stop at Martinique. They brought with them significant knowledge of how to properly make sugar as in Brazil: the process for sugar manufacturing, and also sugar cane cultivation (de Tonné 1667: 467-468-469-470; Lopes 1677: 85-86; Roelofs 1688: 204).

The Dutch refugees may have also introduced rum distilling into the British and French Caribbean. According to French Caribbean historian Lucien Lévyraud (1977: 204): "A few years later, Benjamin de Cussy, in 1644, introduced the first distillation in Martinique." The Dutch expertise in distilling may have been a skill also carried over from the Netherlands or learned at Pernambuco. Some British and French historians have also stated that alcohol production, archaeologists have recovered knowledge and distilling equipment from early British and French colonial sites in North America (Morgan 1986; Noel 1994: 194). However, the Dutch, who controlled the sugar growing regions of western Brazil until 1654 and 55, probably learned and perfected the production of distilling rum and spirits and the by-products of sugar making, and disseminated this knowledge to the British and French colonies in the Caribbean.

Distilling immediately became a central element of the French Caribbean sugar industry. A manuscript (JHC 1896: 1324) from Martinique dated 1648, in which the colony was then seven old, stated: "the slaves are fed with a strong rum, so that they call Brandy *caribe* [Caribbean brandy]." Although French writers sometimes referred to French brandy (*brandy de France*) as the comparative use of the word brandy was locally understood as *caribe* (the imported brandy). In this Caribbean context, *Brande caribe* was likely a distilled sugarcane-



board includes Jennings and suggests that rum distilling preceded Bequaen de Cour's arrival in 1684 (the French source cites de Tont's oral tradition and Wheatland 1992:123).

Paillet de Torie provided an early account of rum making in Martinique. According to de Tont:

The rum and coloured rum, and other distillations [from the boiling process] are not desirable because the shortcomings of the rum and their conditions, and everything that spills over in the workings in the Caribbean plantations were sent to where it is required under the law.

(de Tont 1687-1691:118)

Paillet de Tont's (de Tont 1687-1691:118-117) discussion of a sugar factory in Martinique included a paragraph (deleted) which indicates that distillation quickly became an integral part of French-Caribbean sugar estates. In Ponce's St. Kitts travels Charles de Rochefort (1658:304, 447) also recorded, by the 1680s, the same by-products from sugar making were distilled as *vinasse* to make "roule de rou de couleur."

Early British Caribbean sugar planters also pursued the art of rum making. Holmwood John McCarter argued that, as early as 1671, Barbadians produced alcohol from sugar cane. McCarter's (1989:426) belief is based on evidence that sugar cane was present in Barbados in the first year of settlement in 1627 and that, in 1631, Governor Sir Henry Cobi referred to Barbadians as "devoted to the use of both water and good distillations thereof." McCarter (1989:334-199) also believes that Barbadians purchased and brewed a "malicious New England" style in 1633 based on a 1674 recollection of a drinking party for a New England ship Captain that included "ball-shed, chess, race." Although there are intriguing arguments, Legon made the earliest specific reference to the production of alcohol from sugar cane juice in the British Caribbean. In 1661, Legon, along with his friend Colonel Thomas Modibee (later Governor of Jamaica, arrived in Barbados fleeing civil war in England and seeking fortune in the developing Atlantic trade. Some other facts arrived: Modibee purchased half of Major William Ballant's sugar plantation, which, at that time, already possessed a still house. Legon (1667:33-34) also referred to a drink made from "the shortcomings of sugar" which is infinitely strong, but not very pleasant to taste. /

Another early reference to the MSB sugar plantation deal occurred in Barbados, which referred to “two large narrow casks for liquor for sale” (Ligon 1595: 128). This last reference did not refer to use of the specific term rum. By MSB rum making in Barbados was well underway and it was common for large sugar plantations to have still houses.

What factors explain the early development of New World rum and rum? Local demand for alcohol stimulated initial interest in rum making. The Europeans and Africans that visited the Caribbean came from societies with strong traditions of alcohol use and it was only natural that they would seek to secure alcohol from the available sources once they arrived in the New World. European shipping costs and the demand for other necessary provisions made imported alcoholic beverages expensive and limited the amount of such early settlers. These factors limited the availability of imported beverages and fueled the search for local alternatives to fill the alcoholic void.

Within the first two decades of the settlement of Barbados, and before the large scale initiation in sugar production, colonists experimented with a wide variety of locally made alcoholic beverages. According to Ligon,

The first drink, and that which is used most in the Island, is *Witchin*, a drink made of Peaches, and thus done. Peaches are cut into 4 or 5 parts, and, with a knife, the stones are cut down, till they are made clean, then take them out, and put them into a large clean bottle just made as you keep beer in: in England, and pour them in much water, so will only cover a greater part of them, and cover the top of the pot with a piece of thick coarse cloth, or such cloth as casks are made with, covering it close, that the steamings out not. Then make a fire very moderately, so much only as will cause some smoke to rise, and when they are well take them out, and with your hands squeeze them, and wash them very small, as they were before taking them out: fill the water hot down and scum out all the spirit of the water, which will be done some time or two. Then put the liquor and roots into a large swifter bag, like a jelly bag, placed at the bottom, and run a muslin cloth, over a bar, and with your hands squeeze the liquor out. Cover it another cloth till the next day, and then let it be drunk.

(Ligon 1595: 93)

The term *Witchin* probably derives from the Carib Indian word *wee*, meaning a great variety of sweet potes, or *muli*, a generic term for an alcoholic (Hodge and Taylor 1957: 97). Taylor (1958: 154), in 1627, a Barbadian sugarcultivating voyage went to the mainland coast of Oahu as much of New World plants that could be brought back and

colonially gained in Barbados (Hendler 1988). This reputation started with street peddlers and Caribs who knew the methods of how to produce alcohol from their

Colonies became skilled in the art of making *ponche* and Legue even discovered the ability to increase the concentration of alcohol with the addition of more street peddlers:

*And as you will have it stronger or weaker, put as many or fewer quantities of roots, some make it so strong, as to be drunk with small quantities, that the drink is self-healing/temperately weak, does not at all fly up into the head, but is a perfectly strong quenching drink. If it be put by as much water as Raudillo, or Pitche, it will last five to five dozen good, and drink much more sparingly than any of the for I cannot liken it to anything so weak, as Raudillo is or is the better, but it is made of it in the strength of spirit, and firmness of the roots.*

(Legue 1697: 24)

In the French-Caribbean, missionary Father J.B. Labat also described the production of *mahe* ("mahe") (mahe). According to Labat (1724) 831-154: "they make it in this manner: they put in Canary [water] twenty or thirty pots of water with two pots of cane sugar [molasses] a dozen red peppers and many oranges cut into quarters" (see also de Tourn 1697 107-108) 107-108). *Mahe* is one option to have been combined to the Dutch version of the Legue *Auville*. As late as 1780 *mahe* was still one of the most popular drinks in Barbados (Eggleston 1780: 10).

Common home-alcoholic drinks made from the root of the manioc plant, were also common in the early-Caribbean. In *Maratona*, Father de Tourn (1697 110-111) wrote, "the drink most ordinary is called *Chirwa*." *Chirwa* was an alcoholic beverage made from manioc and a mixture of peppers, sugar cane juice, and bananas (Labat 1724: 100). In Barbados, common-based alcoholic drinks were called *Punches* or *ponche* (Edwards 1621 cited in Hendler 1988: 46; Legue 1697: 22). Legue described *ponche* as "wholesome though not altogether so pleasant" as *mahe*.

As with *mahe*, European settlers learned to make some or-based alcoholic drinks from Caribs and as cheap *ponche* they were the source of these beverages. According to Legue, *ponche*

at work of excoriation, which I told you is a strong poison, another they make their old wines, which are a small remainder of work, and have maligned into water (for the better breaking and mellowing of the work). This poison either in four hours will work, and purge it out of the physicians quality.

(Lapin 1657: 16)

The great contradiction was that cancer or skin was poisonous, yet, once purged of its toxic qualities, it could be fermented to produce antidiabetic beverages. Lapin believed,

That the poison of the old women's' brains and teeth having been treated with many several poisons, to destroy cancers amongst them, though they have many antidotes best suited for it (with such approaches to the poison of the Canary, as they treat their fishes so vehemently one against another, so both spend their poisonous qualities in the conflict).

(Lapin 1657: 16)

In reality, molasses introduced in the year that converted the natives of the canyons into simple sugars that, then, could be more efficiently fermented. Although a slightly different preparation, Lohr (1724: 1: 127) also wrote that French colonists learned the art of making caldas from Caribs who were a common sight in early years of French settlement in the northern Lesser Antilles. The process of making caldas (antidiabetic beverages) in the mountains (present) collected in John von Stiller's 1790 *Reptaire of Guyane: Indes et Americaines* (Paris: Jean Morelet 1955: 65):

Unlike the French Caribbean, Barbados probably did not have a native Indian population at the time of English settlement. Barbadians brought enslaved Caribs to the island in the early years of settlement, where they taught the islanders several caldas. They also knew the art of making caldas. In 1790, Stout de la Bruyère et al. (see Morelet 1955: 65) discussed drinking among Caribs in Guyana and stated: "The people of the language of Guiana are completely given over to drunkenness, and surpass all nations in drinking." In the early settlement period, island Caribs from St. Vincent also made their way to Barbados (Mumler 1949: 197; Hughes 1750: 5; Lapin 1657: 11: 24). The slight difference in the ingredients and methods of preparation between personal caldas and caldas may reflect the particular influence of mainland and St. Vincent/Caribs in Barbados and the greater influence of northern island Caribs in the French settlements.

A variety of other local plants and shrubs were also fermented to make alcoholic drinks. Lapez described the production of an alcoholic beverage made from guano:

Lapez wrote:

Chalchicup: these tall reeds, and at the height of three varas, we pull off the skin, and mash them at sunset with sugar, if we have the time; else at night, we strain it and bottle it up, and at a week drink it.

(Lapez 1631: 11)

In 1741, Giovanni John-Christiano (1741: 132) reported that guano drinks were still widely consumed in Bolivia. Lapez (1631: 11) recorded the production of a wine made from the pineapple, which he referenced as "the Nectar which the Gods drink." In the French Caribbean, Lapez (1741: 131) also believed that pineapple were had an "extremely agreeable" taste. In French St. Kitts, Bartholomew (1652: 447) reported the use of wine made from banana, which he called *crucure*. Lapez (1738: 139) also noted that "the apple of the malagasy" (possibly guava) made a particularly nice wine. Early Caribbean writers also explained the alcoholic potential of plants, oranges, lemons, and peaches (de Tont 1687: 1671-168: 148; Lapez 1738: 133-38; Lapez 1631: 34-35; Simon 1761: 201).

In the nineteenth and twentieth centuries, fermented sugar cane-based alcoholic beverages evolved in the Caribbean. These drinks were primarily found in the early settlement period and were prototypes for distilled rum. Las Casas (1659: 124) made the earliest reference to a fermented sugar cane-based drink in mainland century Hispaniola. His statement stated that Africans were the primary consumers, and most likely producers, of this beverage. Africans shared the European sought to reestablish traditional patterns of alcohol use in the Caribbean. For instance, Bartholomew (1652: 447) reported that African slaves in St. Kitts tapped local palm trees in order to produce a type of palm wine, one of the most widely used alcoholic beverages in West and West Central Africa. Although Europeans came from societies that had consumed the act of distilling and recognized the alcoholic potential of sugar cane, West and West Central Africans also produced a wide variety of fermented alcoholic drinks in Africa and appear to have connected the initial

experiments with fermented mixtures of sugar cane juice in the Americas. The *Libros de cocina* describes fermented sugar cane juice may have inspired Caribbean sugarcane planters to consider the economic potential of sugar cane based alcohol as a local commodity and as a possible export item to African markets. The *Libros*' use and production of fermented sugar cane-based alcoholic drinks, therefore, could be seen as an initial step in the rise of full-scale rum industries.

Las Casas and other early writers did not have a name for a fermented/alcohol made from sugar cane. However, in New Spain, in 1645, an ordinance specifically referred to the fermented sugar cane based alcoholic drink *guapeo*. Guapeo became the common name for fermented sugar cane-based drinks in the Spanish Americas (Saxena 1991: 148). In Brazil, fermented sugar cane drinks were called *guapea* (Almeida 1711: 112a, 203-205; Thompson 1993: 174). In French St. Kitts, Rochester (1688) cited as Davies (1686: 185) did not refer to fermented sugar cane drinks by any particular name, but wrote: "the inhabitants [of St. Kitts] have the art of making a delicious drink of the sweet liquor which is gotten out of the sugar-cane: and that being kept for several days becomes as strong as any sack." However, several decades later, Labat (1724: 154) referred to a fermented drink called *grappe* made of sugar cane juice.

In Barbados, Ligon referred to a drink called *grappe*, which seems to be a derivation of *guapea*, *guapea*, and *grappe*. Although Ligon was familiar with a variety of alcoholic beverages, he never used *grappe* and could not, therefore, describe its production ingredients or taste. In Ligon's list of alcoholic beverages, *grappe* was immediately followed by a drink called "punch" made of water and sugar put together, which as ten days standing will be very strong.<sup>10</sup> It seems likely that Ligon conflated *punch* and *grappe* or interpreted the two different names as two distinct beverages. Ligon made the only reference to *grappe*, which is not found again in the British Caribbean. Instead, as

*Berberis phylicoides* for Rose (Stone [1997] 1998) and the anonymous [1793-18] called fermented sugar cane-based concoctions the "Cool drink." According to Stone:

Taken three gallons of the water, more than a quart of molasses, more than a quart of sugar, it works to produce four more gallons of juice. It is a little more molasses and immediately bottles it, so not least time is ready to drink and in a day it is hot & cold.

(Stone [1997] 1998)

Oldmann (1794-1823) described "Keweenaw [made] of Molasses-Water and Ginger."

Orlish Hughes (1790-94) the owner of St. Lucy's parish, also referred to "cane-rose...a drink made with the essence of boiled cane juice mixed with water and fermented."

The production of fermented sugar cane-based alcoholic drinks encompasses numerous distinct regions of New World origins of rum-making. However, these rum prototypes produced distilling and should not be considered rum. Guaymas, grape, grape, and grape became standard terms for fermented sugar cane-based alcoholic drinks. Although the term quickly disappeared in the English-Caribbean, grape-based became the name for the fermenting cane-component made prior to distilling in the French Caribbean (A.A.). In the 1820s and 40s, rum distillations emerged almost simultaneously in the Spanish, French, British, and perhaps Portuguese colonies of the New World. But, for decades, even distilled drinks made from sugar cane lacked a standard name. Lopez never referred to rum and instead called it *dell' alcoli* and the drink "we make of the fermenting of sugar" is French St. Kitts. *Berberis*, generally called distilled sugar cane juice and molasses was *de vin de canne*. The modified "de vin" derives from French brandy (*de vin*) and made from grapes. The numerous names used for fermented and distilled varieties of sugar cane-based alcoholic beverages highlight the complex nature of defining a new product diffusing throughout the early Caribbean.

The European and African distillers located in the Caribbean Indies experienced a wider variety of available sources and the new arrivals exploited the Caribbees' knowledge of alcohol production. It is interesting to note that early colonial writers often compared the

locally made alcoholic European (distilled) beverages. For example, Lapon (1637:34–35) wrote people tasted “the Black or English beer” and he considered the taste of molasses similar to Blackish wine. Lapon (1637:34) also believed that molasses made from red potatoes looked like stout, while molasses made from white potatoes looked like white wine. In 1640, Felix Spens, a Dutch medical doctor in Barbados, believed that rum was similar to European brandy and molasses to beer (cited in Headley and Cusack, 1992:10). Rodolphe (1658:149–167) believed rum ate rumors (probably the fermented variety of sugar cane juice) could pass for Spanish wine. Father de Tennes (1667:167:111) and Father Labre (1734:123) believed the taste of molasses. Rodolphe (1658:149–167) concluded that French Caribbean rum was similar to French brandy. These comparisons suggest that early colonists attempted to maximize, as closely as possible, the alcoholic beverages left behind in Europe.

Previous crops, such as tobacco and sugarcane, helped sustain early settlements in the Caribbean and generated colonies with markets for alcoholic drinks. But during the sugar revolution, these small-scale crops were pushed aside by colonial planters who sought to maximize available land/resources for sugar cane. The shift to sugar production made sugar everywhere and the waste products of the sugar industry produced alcohol to meet local alcohol demands. The decreasing reliance on previous crops, as well as the decreasing numbers of Caribbean natives available to produce alcoholic drinks, such as molasses, and previous settlement the switch to the production of rum from sugar cane. The increasing number of African slaves and their interest in fermented sugar cane based alcoholic drinks (rum) may have also influenced this shift.

The expansion of maritime activity to the New World spurred the use of rum making. Alcohol has a long history in maritime communities. The potential diseases that could result from the limited availability of fresh water on long sea voyages made alcohol a critical item in long distance maritime trade. Naval experiments with distilling focused on



the distillation of Dutch water from sea water (Binkert 1955: 34) and because of its perceived medicinal and nutritional qualities, alcohol complemented molasses because a preferred substitute for water in maritime activities. Christopher Columbus carried large quantities on his first voyage to the Americas. Enough wine, in fact, that he was able to leave the crew of his *principeps Santa Maria* a year's supply. Dutch physician Pieterseus de la Bove treated gastro-intestinal maladies affecting members of the Dutch East India Company in the seventeenth century, alcohol becoming a basic remedy in the *Boetische Royal Pharmacy* – a tradition that would last 300 hundred years.

The tradition of alcohol was among European seamen and their belief that alcohol was healthy and nutritious cemented the focus for alcohol during the voyage to and from the Americas. Caribbean sugar planters capitalized on this need by producing their own form of alcohol for seamen on the American side of the Atlantic. Already in the mid seventeenth century, Legros (1877-78) wrote that plantation Barbados sold rum to

“Slaves – (when at sea) drunk by the way.”

Local domestic alcohol, increasing availability of sugar cane, yeast and sugar refinery by products, and the exposure of maritime activities stimulated the rumal trade of New World rum making. But sugar planters also came from European countries where an extensive alcohol trade especially in the form of wine had existed for centuries. Mainland planters and traders, the forces behind New World settlement and colonization, appreciated the centrality of the alcohol trade to the economies of Europe and attempted to develop similar trade from the Americas. The growth of rum making in the seventeenth century Caribbean, therefore, highlights the economic efficiency of New World sugar planters who realized that, with slightly greater capital expenditure in distilling equipment, they could produce a profitable commodity from the waste products of sugar. The European tradition of alcohol trading made rum a natural counterpart of sugar production, which helped colonial planters maximize the profitability of their plantations.

Although their stated efforts to open markets for rum were successful, the arguments  
concerning rum trade remained in the margins of the Atlantic world.

## CHAPTER 6 AT THE MARCHES OF THE ATLANTIC WORLD: RUM IN THE SEVENTEENTH CENTURY

In the sixteenth and seventeenth centuries, colonists in the Caribbean sought to reconstruct Old World drinking patterns. They replicated the alcoholic potential of local resources and turned to rum after the start of the sugar revolution. However, the hardships of building a life in the Caribbean became brought about new challenges that increased the demand for alcoholist stimulation. As a result, the rum industry grew. Rum quickly found local and regional markets that helped sustain the growth of American trade. The early Caribbean rum trade created exchanges between the long-isolated New World colonies and the external rum trade created links between disparate world groups. Continental merchants and traders in North and South America also began to accept Caribbean rum in exchange for much needed provisions and plantation supplies. Rum making became a profitable enterprise. Yet, despite its growth, the early Caribbean rum trade remained at the margins of the Atlantic world and failed to penetrate the large alcohol markets of Europe. The use of inferior ingredients and small rills limited the scale of rum production and highlights the underdeveloped state of seventeenth-century Caribbean rum making.

### Seventeenth-Century Rum Making

In the mid-seventeenth century, rum making was present on many Caribbean sugar plantations, especially in the British and French colonies. Richard Ligon provided the earliest detailed account of a rum making operation in Barbados in 1657-1660, at the very beginning of Barbados' sugar revolution. According to Ligon (1657-1660) a good sugar factory would spend no less a "well-borne with two sufficient Indles" and resources to build the stills. "Ligon's" information reveals that, in the early stage of the British Caribbean sugar industry, a still house was already considered an essential part of the sugar plantation

complex(Ligon 1817 85). Although Ligon pointed out the patent of sugar plantation efficiency, his comparison Colonel Thomas Mordaunt did, in reality, purchase a plantation that already possessed buildings and equipment devoted to rum distillation.

Ligon also provided insight into the early art of rum making in Barbados:

According to Ligon:

As for the stills and distillings, which are done in the Still house, from the three lesser-Coppers, it is only one. After it has remained in the Cisterns, which my plot shows you in the Still house, till it has quite cooled, I turn it then, the Spirits well and not made. Still the first Spirit that comes off, is a small Liqueur, which we call Low rum, which Ligon was given to the Still, and drew it off again, and of that comes no Strong or Spirit, as a matter being brought in a new distiller, is the being of a Neophyte or that, when it is ripe, the Spirits with the rest.

(Ligon 1817 92-93)

Ligon clearly emphasized the use of distillings from the sugar boiling process, while molasses, which is generally considered the most important ingredient in rum-making because of its higher moisture content, was, as Ligon(1817 91) stated as an earlier source of his book, is limited to make lower grade products sugar. In fact, it is not entirely clear if molasses was widely distilled in the Caribbean and not even at all. Father Jean Baptiste de Ternes (c.1667-1671) (1840) discussion of rum making in Martinique also emphasized "the spent and exhausted rum, and also the distillings," but did not mention the use of molasses. Instead, Father de Ternes(1667-1671) (1840) writes: "molasses is enough good merchandise when it is used to make gingerbread in Europe." In French St. Kitts, Charles de Rochefort(1654-1646) also reported that the "distillings from the first boiler are only good for feeding livestock, but that the distillings from the others could be used to make a drink, for servants and slaves." It appears that molasses was not used, or at least not widely used, in rum-making until later in the seventeenth century, and that sugar plantation value did not especially or continuously orient it to the molasses when it was believed to make low grades of rum. However, by the late seventeenth century physicians and Caribbean traveler Sir Hans Sloane (1707 LXX) and French missionary Father Jean Baptiste Labat (1704J 155) both recorded the use of molasses in rum making.

Besides relying on lesser ingredients, seventeenth-century Caribbean sugar plantations employed small mills that restricted the level of sugar and limited the growth of the rum industry. Historian John McCusker (1991, 2004) argued that one of the primary reasons for the slow acceptance of distilled spirits in Europe was their high price. According to McCusker, in the seventeenth century in Europe employed small mills, often measured in the size of galleons, which could not support co-occurrence of rum. The small scale of production increased the cost of distilled spirits and kept them beyond the reach of the general public. However, in the late seventeenth century, the introduction of large-capacity mills made possible by the switch to copper, rather than glass and cast-iron, boiling pots or coppers, efficiently increased the level of sugar and reduced the price of distilled spirits. By the early eighteenth century, some large distilleries in Europe were using high-capacity mills capable of holding more than seven thousand gallons (McCusker 2004:211).

In the seventeenth century, mills in the Caribbean were small. Although Capra did not mention the exact capacity of the mills illustrated in the still house, his plan indicated that one mill was slightly more than four feet in diameter and the second, probably used for the re-distillation of over wine, was slightly less than four feet in diameter. Both mills fit into a still house room no larger than 14 feet long, 18 feet wide, and 20 feet high. The capacity of the two mills probably reflected contemporary trends in Europe and held less than 100 gallons each. The mills were likely made of copper. Copper was an important material in the Caribbean sugar industry and used for a variety of sugar-making utensils, including the deep pots or "coppers" used to boil the sugar cane juice. In the seventeenth century, Holland developed a thriving copper industry and the early availability of copper probably reflects the influence of Dutch traders in early Barbados.

The small still house room also contained a large fermenting vat in which the rum-making ingredients were mixed. The fermenting vat was 7 feet by 3 feet and would have held several hundred gallons of fermenting "Spice" a century later. William Belgrave (1744:22), the plantation manager of Great Hall estate in Barbados, advised of

the need for a still known as *levée à vent* [forecasting forecast], which could hold 300 gallons each. The single forecasting device in Laper's discussion highlights the limited extent of early Barbadian distilling. Forecasting systems were initially made of wood stave and coated with a lime limewash.<sup>10</sup> However, in the early years of the highest settlement, before the almost complete destruction of forests, wood was available and, in 1650, the four large cisterns at Tabor House estate were made of stone (Lucas 1995: 132). In the late eighteenth century, stone shaped vats with narrow openings replaced the flat distills.

In the French Caribbean, de Tonty and Rochefort made the earliest reference to distilling apparatus, which they called a *vassegrain*. The origin of the term *vassegrain* appears to come from Louis XIII's 1544 letters, which gave *vassegrain* (*vassegrain*) the right to drink wine tax-free.<sup>11</sup> *Vassegrain* derived from the word *vasse* and was probably the same given to the distillers as which they distillations were (*Château de Laper* 1991: 17–18). The use of term *vassegrain* to describe an alcohol used for rum making demonstrates how French Caribbean rum makers adopted Old World material models to help explain New World substances. However, in the eighteenth century, *vassegrain* replaced *vassegrain* as the term for the French Caribbean distiller. *Château de Laper* is a translation of the British Caribbean term *still*, which reflects the French-Caribbean growing affinity for Caribbean rather than metropolitan culture.

Palmer de Tonty provided the earliest drawing of an alcohol still in French Caribbean. His (1658–1671–1672) mid-seventeenth century illustration also still in Martinique showed a small and simple alcohol distillation device that ran through a wooden barrel of cool water to a receiver. The alcohol distilled by Palmer de Tonty was almost identical to one depicted in General Goussier's 1733 version on distilling (Lucas 1995 and also Holm 1993: 422, Chateaufort 1995: 44–45). In fact, the alcohol barrel was essentially the same design as the locally made alcohol barrel archaeologists recovered from the settlement site of Martin's Hundred, Virginia, which dated to the 1650s (Nicol 1986).

1901–04 [32]. Lapey's depiction of the still house contained two stills, rather than the single distilling apparatus found in de Tonn's illustration. While Lapey provided little information about the types and uses of stills used in Barbados in the 1640s, the second still was probably used for the repeated distillation of clear wine, the spirit produced from the first distillation. The presence of a second still suggests a more efficient and efficient system of distilling and highlights that Barbadian rum production well was making

Early distillation was a conservative art and the level of distillation technology in the seventeenth century Caribbean was comparable to that of distillation in contemporary Europe. Other than the increasing capacity of stills, most major advances in the art of distillation had been made by the 1600s. As early as the mid-fourteenth century, distillers in Europe used multiple distillations to improve their product. By the mid sixteenth century the important technological advances involving cooling and condensing systems, which provided better control over the separation of alcohol during distillation and speeded the distilling process, had also been introduced. In fact, despite later experimentation, distilling technology remained relatively unchanged between the mid sixteenth and early nineteenth centuries (Russett 1979:344). Underwood (1931:51–54) Bowling rum makers in Trinidad in the late seventeenth century who produced spirits as distilled oil drums, employed the same basic principles of distilling methods used in seventeenth and eighteenth century Caribbean sugar plantations (Carty 1982).

Despite the use of inferior ingredients and small stills, rum making in Barbados was not simply a compromise story. Lapey's account of Barbadian rum making suggests that it was already a specialized enterprise that employed skilled distillers who were beginning to master the art of rum-making. According to Lapey, Barbadian distillers had already established an important quality-defining characteristic of rum – the double-distilling produced a highly volatile and concentrated spirit. The art of double distillation was still relatively new in the time Lapey was writing and the secrets had only recently been passed from the physicians, apothecaries, and researchers of Europe (Russett 1979:343–345).

(Underwood 1959: 46-47). In fact, it was around the same time in England that Charles I had granted the guild of the Worshipful Company of Distillers exclusive rights to be the distillers for a 20-mile radius around London and Worcester (Glegg 1952 [c. 1600]; Wilson 1979: 12). Yet, in the 1640s, Barbadian sugar planters constructed buildings and systems for the specific purpose of alcohol production and Barbadian distillers doubtless benefited from such well-made distilleries about its quality. This extremely advanced level of rum production may have led Charles to order for Henry Culi (1631- died in Barbados 1628-45) to write that Barbadians were “the greatest eye of both western and south-gate distillers there”<sup>17</sup>. While it is not clear whether Culi was specifically referring to rum-making, his text suggests that the first colonists in Barbados sought to master the art of alcohol production soon after they settled the island in 1627.

The paucity of seventeenth-century plantation records renders it more difficult to determine the precise levels of rum production or rum’s contribution to sugar estate revenues at the early period. However, the available evidence provides us with enough information to make some generalizations about the value of rum to sugar estates. Economic historian David Eltis (1999a) estimated the value and quantity of rum exports from Barbados and Jamaica at the late seventeenth century using several official shipping lists and two Barbadian customs books, which included export figures from 1684-1685. While not a complete picture, these records furnish a fair proxy of seventeenth-century export statistics. According to Eltis, Barbados exported an annual average of 158,000 gallons of rum in 1685-1686, in 1688 and 1690-1691, but figures more than doubled to an annual average of 342,240 gallons. By 1700, Barbadian rum-exports reached nearly 600,000 gallons (Eltis 1999a: 118). Eltis also claimed that the value of Barbadian rum was increasing. In the period 1645-1655, the value of Barbadian rum exports represented about 7% of exports of sugar and sugar by-product, but by 1700 that figure had jumped to 20%. At the end of the seventeenth century, rum represented 89% of the total value of Barbadian export trade. In contrast, rum-exports from Jamaica were minor and reflected the



less-developed state of the Jamaican sugar industry. In the period 1558-1700, Jamaican rum exports averaged a little more than 5,000 gallons per year and rum represented only 1% of the total value of Jamaica's exports trade.

One source that did not use was Ligon's discussion of the value of sugar and rum in Barbados. Ligon (1657-1722) calculated that rum contributed about 10% of sugar plantation revenues showing that, by 1647, the production of distilled from sugar cane was already a valuable commodity. According to Ligon, rum in Barbados sold for 1s 6d per gallon while uncrushed sugar sold for 1d per lb or £3.50 per short cwt, and clayed sugar for 4d per lb or £3.10s per short cwt. At this rate, a gallon of rum was equal in value to 12 lbs of uncrushed sugar or 5 lbs of clayed sugar. Using price evidence from the Barbados custom books, Ellis estimated that 15 years later, in 1662-1666, a pound of sugar still substantially outweighed rum—now worth slightly less at 2 1/4 cwt—a gallon of rum was equal in value to 12 lbs of sugar. Ligon (1653-1672) clearly believed rum was cheap and sold “at vast rates.” But he also wrote “they [presumably Barbadian officials] were then preparing to raise the price to a double rate.” However, these figures suggest the price of rum dropped in that 15-year period. The 75% drop in sugar prices and 95% drop in rum prices was no doubt due to the increasing availability of these products and because a “floodgate of remunerated planters that restrained the colonies’ commercial freedom”

opened throughout Ligon’s time, as did access to the market of rum made on Barbadian sugar plantations. According to Ligon (1657-166), a 500-acre sugar plantation with two mills could make 120 thousand in a weekly trade. Ligon also wrote (1657-1722) that the “Drink these made sells at twenty pence” through to £120 per month or £1,200 during the 10-month crop cycle. Using his estimate of a half a cwt per gallon, Ligon’s model plantation produced 9,600 gallons of rum during the 10-month crop cycle. At this rate, the plantation produced 116 gallons of rum per short cwt of uncrushed sugar. However, Ligon made his calculation based on a twenty-month producing cycle in order to show the economic benefit of producing refined white sugar. Under this more profitable system, the

quantity of sugar decreased as more molasses distilled away and the proportional increase in rum resulted in a ratio of 4.3 gallons of rum per short ton of sugar. If we include an additional 10% for rum “drunk” by workers and slaves, the ratio increases to 4.7 gallons of rum per short ton, of refined white sugar.

French-Caribbean sugar planters also profitably made more commonly known in 1816 in the late seventeenth and early eighteenth centuries, Labor (1734) 331-334) considered a windmill as an essential part of a black-sugar sugar factory and a sugar plantation was expected to have one slave or slaveless. Labor (1734) 333) estimated that a sugar plantation of about 750 acres would produce 331,000 lbs. of sugar and 60 barrels of rum, about 4,542 gallons, in a 30-month crop cycle (see also Jara 1931, Pomeroy 1952). According to Labor, 10% of the rum was allocated to the plantation’s 128 slaves to supplement their diet and help reduce plantation costs. The remaining 54 barrels were sold bringing 3,000 livres (Jara 1931:34,40; Kervynck 1946: 20, Labor 1734) 333). Rum combined about 7% of sugar plantation revenues and the estate produced a ratio of about 1.7 gallons per each short ton, of muscovado sugar (based on Jara 1931: 40). Thus, black-sugar sugar planters produced less rum per acre, but the ratio of rum to sugar production was almost identical to that Labor identified in Barbados’s half-century earlier. Labor also believed that the ratio of rum to sugar was about 30% of the plantation expenses (Jara 1931: 58-60; Kervynck 1946:21; Labor 1734) 333-334).

In the seventeenth century, most of the rum produced never left the island. For example, according to Ellis, in 1665-1666, Barbados legally exported an annual average of 150,000 gallons of rum. Labor’s plantation alone produced more than 6% of that amount. Labor identified as many as 265 plantations on his map of the island covering the period 1667-1680. However, according to historian historian Peter Crompton (1980: 144), the Labor map was reproduced from an earlier map made in 1634 and therefore, left off the names of many large sugar plantations founded in the 1640s. Richard Ford’s map of Barbados provides a more accurate picture of the number of plantations for the 1660-1680

period. Published in 1975, Ford's map identified 184 plantations. About 150 were sugar plantations, but few of them were as big as 300 acres. According to historian Richard Druse (1971-96) a Barbadian sugar plantation "of 300 acres, equipped with two or three sugar mills and a hundred slaves, was considered the optimum size for efficient production." Druse also showed that 173 of the island's biggest plantations averaged an average of 267 acres each. If these large plantations achieved the mean level of rum-making described by Ligon, then they could have produced about 1.7 million gallons of rum. Even if we take into account the smaller size of these plantations and use Ligon's estimates to calculate the amount of rum produced per acre, then these big plantations could have still produced nearly 900,000 gallons. Thus, while rum consumption was enormous, Barbados probably exported only 3-20% of its rum and local consumption was enormous.

A close reading of Ligon and LaBarbierre at the level of local rum consumption. According to Ligon (1673-91), a plantation of 300 acres produced about 240 gallons of rum per week, "besides what is drunk by their servants and slaves." According to LaBar, 10% of the rum produced on his model Maricaoque sugar plantation was consumed by servants and slaves, which averaged out to an annual per capita consumption rate of about 1-4 gallons. Adding 10% to Ligon's rum production estimate and allocating that to the 130 servants and slaves results in an annual per capita consumption rate of 1.2 gallons, not unusually high when we consider the greater number of white indentured servants on Barbados and their propensity for drink.

Evidence from the late island rum trade also suggests that the level of local rum consumption was enormous. In 1975, many small plantations on Barbados continued to produce rum sugar molasses. Ligon pointed out that there were many small plantations

which are not able to raise a sugar work or set up an ingenio, by reason of the paucity of acres. Being not above twenty thirty for locally consumed plantations, but there will be (to no little Tidouan) twenty three and thirty. Yes, and, and, Plantations, as also for breeding hogs.

(Ligon, 1687-94)

These small planters relied on sugar planters for their molasses. Lague (2017: 83) wrote that rum was sold “to much Planters, as have no Sugar works of their own: yet drink immensity of it.” Moreover, rum making may have been confined to larger sugar estates. In 1666, the Barbados Assembly passed an Act “That no Person or Persons within this Island... shall be permitted to keep up still or stills for the distilling of Rum, Brandy such Persons as Persons have land and Cane of their own: or make or keep Stilling Houses” (Rawson 1990: 71–72). Under this law, it would have been necessary for the vast majority of Barbadian colonists to get their rum from the larger sugar estates with still houses. Big planters would have had great control over the flow of rum on the Caribbean, which they either sold directly to the community or shipped out to distant and remote colonies.

There is some evidence that rum making was not entirely restricted to large sugar estates. Ellis’ (2000: 202) study of the 1664–1667 Barbados census books showed that, while 47% of all produce handled by the custom house belonged to only the top wealthiest 20% of those entering produce, the remaining three-fifths managed to supply some rum.<sup>2</sup> For the bottom 20%, however, the rum was not economically significant suggesting it was likely consumed through the luxury of rum for labor. Many of the remaining three-fifths may have entered rum acquired as payment for their services, particularly for those expensive services of mechanics, lawyers, and skilled craftsmen. Smallholders with modest distilling operations may have entered more of their rum. Despite the 1666 restrictions on rum-making, smallholder distilling operations probably existed in Barbados as they did at other parts of the British Caribbean. For example, in 1714, a visitor to Antigua noted in Ellis (2000: 202) wrote “the present trade... without making anything but Rum, find yet trade and yet Cane after grinding serves for brandy and for still.” In Montserrat, historian Rex Barbados Schiller (1980: 281) described 17 rum works operating in 1670–1679. According to Barbados Schiller despite the Montserrat Assembly’s emphasis on encouraging the development of large sugar estates, large producers managed to produce and sell rummation, including rum. For example, in the first 1670s, sugar-plantation George

Gill and Cornelius Bergen "was licensed to make rum, and personally they [Gill] had access to small-scale power" (Barbados-Jordan 1989: 161).

In the early nineteenth period, scientists explored the wide range of local alcohol resources and even tapped the alcoholic traditions of Carib Indians. The use of sugar molasses provided another alternative. Certainly, the desire to increase indigenous drinking patterns in the Caribbean opened the initial demand for alcohol. As mentioned earlier, Caribbean-scientists often compared local drinks (including rum, to the alcoholic beverages they were familiar with in Europe. However, the Caribbean Empire colonized a new set of material demands that elevated the cultural value of alcoholic beverages and accelerated the growth of the internal marketplace.

Many scientists were devoted to a good minimum fermented, or potentially related water (Akyempong 1996: 54; Ransburgh 1979: 93-97). The lack of potable water was a major concern in the nineteenth century Caribbean, especially in Barbados, which lacked abundant streams. Thus, Gill wrote:

This water is dark and not of perfect . . . pale water few or none; a single surface, green water out of some glassy mass, though not other than lemon juice, or if it looks water (after a small time it is tasted a little

(Gill 1831 cited in Barbos 1925: 87).

Lopes (1837: 38) also noted "there is nothing so hot [hot] as the island (Barbados) is much wanting, as Springs and Rivers of water." The capital of Bridgetown was particularly affected and the fear of island water was especially evident during a yellow fever epidemic that occurred in 1847. According to Lopes (1837: 32), the bodies of those who succumbed to the disease were thrown into the town's swamp "which suffered under water, as does the drink of it were absolutely poisoned, and died within a few hours after. but others taking warning by these lessons forbore to touch any more of it." Ponds were constructed on some plantations to water slaves and livestock (Bridgman 2001). However, the people of Bridgetown probably relied heavily on cisterns set up on the roofs of their houses for their water supply, and, while cisterns were sufficient for small families and individuals, they could not always adequately meet the water demands of a large population, especially after

the use of sugar plantations and the subsequent increase in numbers of African slaves had European origins. Druggies were a constant fear. Even when water was available, it was not necessarily preferred. Negative European attitudes towards water – probably founded upon similar Old World fears of tainted water – reduced the desirability of alcoholic beverages in the Caribbean. Later (1770-1810) sugar-burns could last when no water, when water was available: “only alcohol and chocolate drink water.” Both scenarios also increased the demand for rum. Not every colonist, however, held negative attitudes about water and many considered the use of fiery spirits in the hot climate of the Caribbean a dangerous combination. Cobb (1814) cited in Huber (1975: 66-68) warned that the tropics encouraged the frequent consumption of cold water and advised the colonists, “Your young and hot bloods, should not have eyes [attracted] addition to constant yet flame: but rather cold water to quench it.”

Although alcohol actually dilutes surface blood vessels and cools the skin, Europeans perceived it to be a hot fluid. The best European alcoholism alcohol especially distilled spirits largely reflected their Indian/Galena perception of health – which operated on the premise that good health could be achieved and maintained by balancing the hot and cool wet dry dispositions of the body. Galenic principles governed medical treatment and the early years of American settlement and spurred many colonists to use alcohol to counteract the effects of cold weather and chills. For example, historical archaeologist Peter Papp (1997) argued that health as the best restoring qualities of alcohol greatly increased the value of distilled spirits among seventeenth century fishermen on the cold wet shores of Newfoundland. Caribbean colonists also believed that distilled spirits were an antidote to cold, which, no doubt, motivated Caribbean sugar planters to drink heavily and allocate rum to slaves and servants who worked in chilly – wet, or damp weather. Lapsa-Wexler,

For when they [the slaves] are ill, with taking cold, (which often they catch) very cold they say, having cooling water there in the night but a board upon which they lie, set any thing to cover them, and though the storm be hot, the night be cold, and the change cannot but work upon their bodies, though they be hardy

people. Besides coming home hot and sweating in the evening, almost all long drivers must succumb to the stresses of taking mail, and sometimes handle serious responsibilities which when they fail, they consider a real sign of failure. The *Plumero*, which we call *Donce*, and he gives to every man a drink cup of this *Spice* (juice) and this is a potent cure. And in this drink is of great use to cure and refresh the poor *Nagras*, whom we ought to have a special care of, by the labor of whose hands our people is brought on, so is it helpful to our Christian servants too, for when their spirits are cheered, by their hard labor and sweating with this hot drink every day, they find their stomachs refreshed, and much-endured sickness regains every way a decrease from this *Spice*, is a great medicinal refreshing to them.

(Lopez 1487: 82)

Lopez's comments represent the widely held belief that illness was caused by an overheating of body heat. Thus, on cold days, days, and other times of sweating in the sun, the consumption of run, a hot and fiery fluid, was an appropriate, as well as a payable, way to re-energize heat back into the body (Lundin 1900; Reinberg 1978: 134).

Run was not only considered good for restoring body heat, but, as a fiery fluid, run was also believed to counter excess internal body heat. Yellow fever epidemics spread through the early Caribbean and were generally characterized by high fevers. The Caribbean medical community endorsed folk beliefs about the use of "fire to drive out fire" and employed run for that purpose. For example, historian David Geggus (1982: 168, 169) has shown that Spanish surgeons in the Caribbean generally thought that a violent fever might give doctors an opportunity to attack. The demand for run in the Caribbean, therefore, partly reflects the application of folk beliefs about the power of alcohol to regulate body temperature.

The high caloric value of alcohol may have also increased the demand for run. Every gram (1/4th ounce) of alcohol (undistilled) provides 7 calories to the body (note of the constant). Thus, an amount of a half of 100-proof run would have provided the consumer with 147 calories (Klevay and Klevay 1978: 15, 16). In order to eat plants in order, some Caribbean planters supplemented their alcohol diet with run (Lundin 1704: 132) (Prydzal 1997: 184). However, while alcohol provided a high amount of calories, there

were generally inferior to ours, which lacked nutritional value and did not contribute to a healthy diet (Living and Rosen, 1978: 114).

In one of the more unique comparisons, alcohol historian W.J. Burroughs argued that the diet of North Americans increased the desire for highly concentrated distilled spirits. According to Burroughs (1979: 117), a monotonous diet of "fishy, oily foods, especially food containing seal oil, pork, left Americans in need of a complementary beverage, and the concoction turned out to be whiskey." A similar argument could be made for the seventeenth-century Caribbean, where a monotonous diet of heavily starched foods such as potatoes, cassava, and maize was common. Maize consumed primarily of boiled pork and salted fish (see Ligon 1657: 29-30). As for North America, diet probably increased the demand for a beverage with a high alcohol content. In the seventeenth century Caribbean, rum was the most available.

Anthropologist Donald Horowitz (1963) observed the first general theory to explain excessive alcohol use in particular societies. Horowitz's theory was based on the idea that societies experiencing high levels of anxiety drink heavily. Although the model focused on anxiety resulting from scarcity of food resources in hunting and gathering societies, the model has been broadly applied to a variety of cultures that create cultural stress. In the early Caribbean, the situation associated with building a life on the unpredictable Caribbean frontier made alcoholic consumption an important tool for physical and emotional escape. There were plenty of reasons to anxiety. For example, competing rival slave and indigenous groups brought together within the confines of a coercive labor system, loneliness, separation from familiar surroundings, the threat of foreign diseases and epidemiological disasters were only a few of the numerous anxiety creating forces at work. In the seventeenth century, rum not only provided drinks for escape in the rain-making colonies, but also provided drinks within the groups throughout the margins of the Atlantic world.



### Development of Seventeenth-Century Run

In the same way that the grape wine trade gave rise to large-scale commercial networks between northern and southern Europe, run helped foster the growth of Amerindian (Hoseloff 1979: 224). The Amerindian run-trade increased long-distance contact to all which provided a market for Amerindian traders and encouraged shared interests in Amerindian displacing. As with the wine trade in Europe, the run trade helped the growth of merchant capitalism on the American side of the Atlantic.

In the seventeenth-century, colonial North America was primarily a destination for Caribbean run, especially from the British colonies. Merchants in New England's export markets, primarily Boston, Rotterdam, Chesapeake planters, African slaves, Native Americans, and traders for traders all consumed their share of imported Caribbean run. The colder climate of North America was conducive to beverages with high alcohol content and North American colonists, as with their Caribbean counterparts, experienced relaxed winter demands, a monotonous diet, and anxiety. These and other factors spurred the demand for run and the rise of the Caribbean. Colonial run-trade Caribbean sugar planters were eager to respond to the demand and refined methods for turning the waste products of their sugar mills into a profitable alcoholic commodity.

Seventeenth-century colonists in North America experimented with a wide variety of locally made alcoholic drinks. Distilled wine and apple cider were common folk drinks in early North America and archeologists have excavated evidence of beer-brewing operations at numerous seventeenth-century colonial sites (Dutton 1979; Gilman and King 1991; McCluskey 1989-1991; Monahan 1986; Rensselaer 1979-1981, 110-111, 226). As early as 1540, Thomas Harriot, a member of the Walter Raleigh's Virginia colony, recorded the production of an ale from local maize. Harriot also identified two types of indigenous grapes that could be used to make wine (Hakluyt 1986: 114). In the early seventeenth century, England had no significant wine industry and King James I encouraged wine production in the Virginia colony as inferior to what England's dependence on imported

southern European wine. In 1649, Lord Delaware considered French grape wine as North America and, in 1655, the Virginia House of Burgesses passed an act requiring all settlers to not make food for grape vineyards. There were numerous attempts at cultivation, but the cold climate and availability of other alcoholic beverages impeded the growth of Continental wine-making (Clarke 1991: 248-249).

In seventeenth-century Colonial settlements, rum was represented with distilled spirits. Archaeologists have recovered evidence of distilling at a number of early seventeenth century sites in North America (Carter 1958-67, Nash 1980: 195). In the 1640s, North American distillers began producing grain whiskey. However, grain distilling was problematic due to variety of rums. According to McCarter (1996: 603), Continental merchants, particularly in the southern colonies, were opposed to grain distilling. As early as the sixteenth century, New York merchants argued that grain distilling was a threat to their business because grain liquor created mixed brandygeums and prevented the poor from paying off their debts. Increased grain prices also raised the price of flour and made North American rum less competitive in the export trade to the Caribbean (Mancoske). It was in the merchants' interest to strengthen the trading-rum and molasses trade between the Caribbean and North America. In 1676, an act of merchant pressure Governor Edmund Andros prohibited grain distillation in New York.

The availability of imported rum and molasses reduced the Continental colonies need for the local production of grain based spirits, in the seventeenth century. British Caribbean rum dominated the Continental trade, but French Caribbean rum also found its way to the Continental colonies via British-Caribbean ports (McCarter 1996: 60). Barbados emerged as the leading supplier of rum to the Continental colonies. Ellis (1992-93: 199) observed that in the period 1690-1700, Barbados alone exported an annual average of nearly 600,000 gallons of rum. Little of this rum made its way to European markets. In 1700, England and Wales imported less than 3,000 gallons. In 1703, Sloman (1707: 166) still felt the need to explain to his readers in Europe that rum was made from sugar cane. The

capacity of the 800,000 pounds of Barbadian rum sent to North America – particularly the Chesapeake and New England. In the period 1605–1700, 36% of the value of all Barbadian exports to North America went to Virginia and Maryland. Most of this was in the form of rum. Moreover, the Chesapeake trade represented 9% of the value of all Barbadian exports. In this same period, New England consumed 27% of the value of all Barbadian exports to the North America, slightly less than the Chesapeake. However, 55% believed that molasses, rather than rum, represented “most” of the New England trade. Of course, by the end of the seventeenth century, New Englanders took it upon themselves to turn almost all of that molasses into rum.

Barrabough (1979) believed that Continental merchants were largely responsible for the rise of Continental rum exports. According to Barrabough (1979: 63–64), “lacking hard money and fearful of credit, American merchants turned to liquor. Rum was the currency of the age.” In the seventeenth century, rum fueled the trade links between the Continental and Caribbean colonies. For example, in 1683, Thomas Ashe, writing about conditions in the newly settled North-Carolina colony wrote: “The Commodities of the Country as yet proper for England are Furs and Cedar. For Barbadoes, Jamaica and the Caribbee Islands, Provision: Peas, Turn and Clapproot, for which they take in Exchange Sugar, Rum, Molasses and Ginger, etc” (1761, <http://www.088300057>). The rum-trade between Barbados and the Caribbean may reflect the strong trade ties that developed as a result of the great number of Barbadians who settled in the Caribbean in the late seventeenth century.

Ties between the Caribbean and the Colonial Colonies often reflected family strategies. For example, in the mid-seventeenth century Constant Edwards, a wealthy and politically powerful sugar planter in Barbados, is thought to have produced as his plantation his food, clothing, and farm stores produced on his brother’s estate in Rhode Island, New York (Smith (1996)). The Hanchison family of Boston, including cousin Philip Landford, a Rhode Island merchant with family connections in Barbados, exemplified this family-based trade network. By joining family members throughout the developing Atlantic

world and catering to the local demands, the Hachens family constructed a slave-based commercial system that made them one of the most powerful forces in the emerging Atlantic economy (Bridges 1988: 88-100).

Merchants and shippers of the Dutch West India Company were important links in the Continental-Caribbean trade traffic. The long history of the Dutch-looked trade to Europe suggests that Dutch planters and traders may have initiated early-run trading in the British and French colonies in order to increase the New England trade (Brenzel 1979: 243; Brittain 1987: 191). In the early seventeenth-century, Massachusetts welcomed an open trade relationship with the Dutch. Historian Bernard Bailyn (1983: 44) suggests that Dutch traders helped New Englanders identify the needs of Caribbean planters and acted as middlemen between the two regions. In 1653, the Dutch Parliament imposed the first of a series of Navigation Acts aimed to curb Dutch control of New World shipping and trading. These Acts restricted the Massachusetts trade with Caribbean islands, especially with Barbados, which, at that time, was sympathetic to the Royalist cause. By the late seventeenth century, after Navigation Acts, the rise of New England's own merchant shipping business, and the increasing dominance of family trading networks reduced Dutch influence. However, according to Bridges (1988: 128) large quantities of Caribbean rum continued to enter New England through Dutch-New England smuggling operations based in New Bedford.

In the seventeenth century, Caribbean rum fed the North American fur trade. Native Americans continued to drink for a variety of reasons, including its unique physiological effects and ability to take one's spirit away. Historian Peter Menzies (1998) explains the role of alcohol in the Native American fur trade. According to Menzies, despite attempts by colonial officials, missionaries, and Native Americans to suppress drunkenness to curb the use of alcohol in the fur trade, alcohol was traded to the Indians and consumed in throughout the colonial period. The trade in Caribbean rum feeding planters' Native Americans squarely within the context of the emerging Atlantic economy. Using Hooton's

1880) theory about the role of sensory overstimulation drinking. Munnell (1993 ch. 2) argued that alcohol provided Native Americans with a escape from the intense stress brought about by epidemic disease and rapid cultural change. Although Native Americans in Eastern North America had no prior history of alcohol use, rum was transported and made local commodities. In particular, it was occasionally used as a narcotic fluid that helped facilitate communication with the spiritual world. The initial use of rum was primarily confined to Native American mourning rituals and social games. European alcohol use among Native Americans has also been interpreted as a form of cultural resistance to European possession and American expansionism (Laine 1979).

In the late seventeenth century, French colonial administrators Jean Baptiste Colbert implemented mercantilist trade policies known as the *Edictes*.<sup>1</sup> The policies restricted French Caribbean trade with Europeans and sought to encourage direct trade between the French Caribbean and French provinces in Canada and Louisiana. French Caribbeans had access to furs, fish, fur and provisions that were much needed in Caribbean sugar plantations. In order to stimulate the trade, Colbert's policies included free trade status until, at early as 1685. French Caribbean rum trade on way to the northern French colonies (Quail 1976:476-478).

Much of this rum probably fed the French fur trade. In New France, French missionaries worried about the harmful effects of excessive drinking by Native Americans. But as in British North America, alcohol was an integral part of the French fur trade and they were unable to abolish the alcohol for the market. According to anthropologist B. C. Bailey (1979:117): "without a considerable fur trade the sobriety of the colony (New France) could not be attained." The regular distribution of alcohol was a means of maintaining Indian loyalties as well as gaining new friends." Munnell (1993:132) argued that the fur trade at New France "represented a clash of two dominant French ideologies in Canada: the Jesuits' view of mission as spread the faith and the merchants' plan to increase trade." In 1660 François Arnaud de Launay de Montigny, bishop of Québec, began

encompassing for Indians who sold liquor to the Native Americans. In 1671, a meeting was held to debate the future of the fur trade in New France. DeMeuseux presented the trade while colonial officials saw the trade as the only way to maintain the colonial economy. In 1679, after hearing the arguments, the King of France ordered that the fur trade could continue without major restrictions on the use of alcohol (Joliffe 1955: 140).

Clearly not everyone in the British and French Continental colonies was pleased with the increasing quantities of rum. Throughout the early colonial period in North America, officials and religious leaders attempted to curb excessive drinking, which was blamed on the overabundance of Caribbean rum. Although Borthwick mentions drunkenness first related to rum in the early North American colonies, it is clear that early colony officials and colonial officials had great reservations about the early availability of alcohol and increasing levels of drunkenness (Crosby 1985: ch. 1, 1994). Drunkenness about excessive drink appears throughout seventeenth century North America and early temperance advocates often couched their arguments in Biblical terms. In 1708, for example, Reverend Corns Mather (1708) warned the people of Boston of the "World Conquerment" of the great "Flood of Baal" that was overwhelming their colony society.

As early as 1606, the Governor of Connecticut had banned the import of "Rum Kili-dell" or the like; the governor from Connecticut later showed a report of the Act the following year (Thornhill and Hoadly 1858:1255). In 1677, similar concerns led English officials in Newfoundland to maintain the extent to which rum was responsible for the delinquency of the Indians (Joliffe 1955: 138). Colonial Associations were especially concerned about drinking by "Gangrene" slaves" and, in 1685, for example, officials in New Jersey prohibited the sale of rum to Native Americans and African slaves except for medicinal purposes (Hart 1990:135, Wright 1943: 142-144). Gangrene colonists on the Continental frontier perceived the use of alcohol by large numbers of Native American and African slaves as a potentially volatile combination.

Prohibitions against rum reinforced the power of merchant capitalism. In particular, Boston merchants greatly benefited from the growing Caribbean rum trade. Rumbough (1979:64) argued that New Englanders preferred a trade route based on rum because, "Unlike other goods, including molasses, rum shipped easily, could be manufactured cheaply, with secondary climate and transport benefits, and consumed in rules as except" in the seventeenth century. Officials in Massachusetts reacted over 40 years ago, and restricting colonial drinking. According to historian David Colony (1994: 88), alcohol embargoes in Massachusetts were enacted to support ethical ideals of purity as well as reinforce the perceived authority of colonial officials. In 1664 and 1667 officials in Massachusetts declared rum a "nuisance to society" and attempted to ban its use (Buldyr 1955: 139). In 1713, Boston officials banned the sale of rum at taverns, but the economic importance of the Caribbean rum trade meant that the "ban was a dead letter as soon as it was enacted" (Colony 1991: 31).

By the late seventeenth century, New Englanders began distilling their own rum from imported Caribbean molasses. *Encyclopedic Dictionary of Salem, Massachusetts* ran a distilling operation as early as 1688, but it is not clear whether Distilling was distilling rum from imported Caribbean molasses or whisky from Continental grain (Buldyr 1955: 129; McCusker 1989:426). According to historian Jay Cougle (1981: 41), a commercial rum distillery was operating on Rhode Island in 1684. John McCusker (1989:426) argued that King William's War (1695-1697) was the impetus for rum production in the Continental Colonies. During the conflict, Britain prohibited imports of French brandy, which led to opening the rum in the British colonial market. However, in 1697, the last year of the war, England and Wales imported less than 100 gallons of rum and none of a name from North America. In fact, the first New England rum exports did not reach England until 1704 and even then amounted to a mere 23 gallons. Local and regional demand was the impetus for the growth of New England rum making (McCusker 1989:426-431; 433-437). New England merchants also profited from rum making because it reduced dependencies on, and

therefore the price of. But should French/Caribbean men, New England merchants were particularly adept at using New England-made rum to attract trade with the fisheries of Newfoundland (Taylor 1993: 29–33; McCarthy 1999: 424–432).

In the seventeenth century, the Spanish American colonies were another primary destination for Caribbean rum. The high taxes imposed on imported Spanish wine and brandy, the ubiquity of rum in the diets, and the fact that Spanish wine occasionally went bad on the long sea-voyage to America, led to experiments with alternative alcoholic beverages. For example, in New Spain, *pulque* (made from the maguey) became a principal alcoholic beverage, particularly among Indians (rumen located outside urban centers) (Taylor 1979: 65). In the Viceroyalty of New Granada, *chicha* beer made from local grain was popular (Llanusa 2000: 53–56). Groups were making *aperitivos* (beverages) also flavoured in the Mosquera Valley of Peru (Rios 1996, 1997; Rios and Joseph 1999). In some parts of the Spanish Americas, local alcohol production helped defray the cost of running local governments. For example, in parts of New Spain, officials encouraged *pulque* production because liquor and land revenues helped fill local governmental coffers (Taylor 1979: 47). However, *pulque* production was only encouraged in rural areas where Spanish wine and brandy imports were unable to meet local demand. In urban centers, like Mexico City, Spanish colonial officials aggressively discouraged local alcohol production, especially when it threatened colonial revenues from Spain-derived and brandy import taxes (Taylor 1979: 45–46). From the beginning of Spanish settlement, wine and brandy import taxes played a key role in keeping colonial governments solvent. In Hispaniola, for example, Christopher Columbus proposed a 10% tax on Spanish and Canary wine imports in order to help finance the Spanish conquest and settlement of the Indies (Las Casas 1931: 26).

In the sugar-stake-growing regions of New Spain, New Granada, and the Spanish Caribbean, colonists produced quantities of coffee (rum), and domesticated members of



superstition (also known as *garapeo* and *chiguaros*). However, the bad state of sugar production reduced the availability of rum-making ingredients and undermined the profits of the industry. Yet, many Spanish colonial officials still saw rum as a threat to economic stability. In New Spain, in 1613, Spanish officials banned the production of the fermented sugar-cane-based drink *guapeo* because it was seen as using it to subvert Spanish rule (Bandiera 1993: 162). By 1614, official prohibitions specifically targeted the production of alcohol distilled in stilleries and the punishment for those caught producing *aguardiente de uva* included public whipping. In Cuba, in 1641, the Havana town council claimed that growth of local rum-making diminished the colony's revenues and colonialism Alonso de Lemos proposed to curb this threat by equalising the price of Spanish wine and locally produced rum (Chen-Chuan 1988: 50).

Officials also blamed rum for health problems and moral decay. The highly volatile nature of rum may have compounded the issue of Spanish colonials, who typically consumed extremely weak wine with meals and as Catholic religious practices. In 1623, prohibitions against *aguardiente de uva* were imposed. The law emphasised the harmful effects of a *guardiente de uva* on Indian peasants (García 1940: 183, 187, 400–401). In New Granada (Colombia), colonial officials faced similar struggles with rum. As early as 1638, the viceroy of Santa Fe de Bogotá complained about the harmful social impact of rum on Indian peasants (Morales Torero 1988: 176). In 1684, the governor of New Andalusia (Venezuela) also argued that rum was harmful to the people of that region and urged that stilleries in that area close operations (Pardo de Lanza 1997: 62). Prohibitions against rum-making were also initiated in Cartagena and the kingdom of Guayana (Morales Torero 62). By the end of the seventeenth century, Spanish and Spanish colonial officials were sufficiently concerned about the negative moral and economic impact of rum that, on June 2, 1695, the Crown initiated a comprehensive prohibition against rum-making in the Spanish colonies (Cuba post-royal, Archivo General de la Nación, Caracas, Venezuela, Archivo Real de Cádiz, *papeles puros*, volume 10, real cédula number 37, folio 144).

[17th c.] However, the frequent violation of the ban in the following century suggest that the prohibition was often evaded.

The restrictions on Spanish-Caribbean rum production, the limited nature of the Spanish-Caribbean sugar industry, and the high cost of Spanish wine and heavily restricted the availability of alcohol. As a result, no legal rum trade developed – which made the Spanish-Caribbean primary destination for British and French-Caribbean rum. According to Ligon (1657: 98), rum was “a commodity of great value in the Plantations, [first used at about 1650] the Bridge [the original port of Bridgetown], and then putts off to those that reach it. Some they sell to the Ships, and a consigned into foreign parts.” Ligon’s reference “foreign parts” suggests that the Spanish-Caribbean was the likely destination. In 1673, a Jamaican trader traveled to Cuba and purchased 50 casks in exchange for rum (Cline-Clark 1993: 51). Labor wrote that French-Caribbean traders sold rum

in Spanish-on the coast of Caracas, Cartagena, Honduras, and the big islands where they don’t produce it or use wine make it more, and by exchange get with them with good English glass bottles with good muskels and corkers with wine or clode from Holland for 18 or 12 bottles.

(Labor 1724: 135)

Coke Indians of the Lesser Antilles also provided a good market for Caribbean rum. Contemporary alcohol studies have highlighted Native American drinking in colonial settings (Dunley 1979; Lurie 1979; MacLean and Edgar 1989; Marshall 1995; Girard 1976). In general, this research has viewed pathological drinking and explained the widely held notion that “Indians can’t hold their liquor.” These studies have shown that such stereotypes typically developed in European colonial settings and were mostly “written in” to help justify the conquest, removal, or mistreatment of natives from their land. Despite an enormous amount of information about Native American drinking in North America, we know little about alcohol use among Native peoples of the Caribbean.

The Carib and Taino were the two most numerous Native American groups in the island-Caribbean at the time of European contact. However, the simple binary distinction may more accurately reflect the European position. There is no dispute the Caribbeans

Indians they encountered rather than any self-identified identity. For example, John Seed Bailey (1958) argued that the Caribe/Tucano dyad represents a political designation constructed by the Spanish to identify groups for their potential as slaves, trading partners, and military allies. The Caribe/Tucano designation may have also been a useful tool for enfolding Caribbean Amerindians during periods of increasing European migration. Historians and archaeologists continue to adapt this dyadic cultural scenario (Rouse 1992; Sauer 1966; Winter 1996).

The Tucanos were the Amerindian-speaking Indian group of the northern Guianan Andes, who greeted Columbus when he reached Hispaniola in 1492. According to Céspedes de Cosca, a Portuguese-Columbian second voyage, the Tucanos did not use alcohol. Cosca's reference has been widely accepted as evidence for the lack of alcohol use among the Tucos. According to historian Carl Sauer (1966: 31): "Perhaps the most important fifth race [between mixed Aztec and Guaymolinian descendants in South America] is that the Indians drink no alcoholic beverages." (see also Winter 1997: 53-54). Archaeologist Irving Rouse (1992: 11, 18) also accepted Cosca's reference and argued that the lack of alcohol use was a distinguishing cultural characteristic of the Island Tucos. Rouse's archaeologist Peter Rouse (pers. comm.) has recovered pre-Columbian ceramic bowls on Tucos sites that, he believes, may have been used for the production of beer. While the evidence for alcohol production and use among the Tucos is weak, they do differ from indigenous peoples with other drugs, including a tobacco staff called *calabaz* which was widely used in Tucano religious ceremonies (Rouse 1992: 118). Spanish colonists introduced alcohol to the Tucos in the early years of settlement and, for example, Las Casas (1958: 188) complained that the Spanish slave holders often killed or poisoned their captives with wine. Disease greatly reduced the Tucos population. In 1514, there were only about 20,000 Tucos in Hispaniola and by 1540 they were nearly extinct (Haupt 1991: 7). Because of the rapid decline in Tucos population and the late development of wine making, it is unlikely that the Tucos ever produced and distilled wine. However, Las Casas' reference

in fermented sugar cane-based drinks was contemporary with a Taino presence in Nagasaki.

Cane Indians outside the Taino had a strong tradition of alcohol use and made a variety of alcoholic beverages. Cane-based alcoholic beverages, like others and prior to being regularly consumed and received institutionalization from elsewhere, Pissas based medicine was also popular (de Trazes 1967: 1070-113; 118; Lefeb 1724: 133-134; Ligon 1607: 12).

The west Indian colonies had many European ships on Cane centers in the Leeward and Windward Islands. These islands often represented the first landfall after weeks at sea and they provided travelers with a place to rest and recover from the long voyage. As a result, an important trade developed between Caribs and Europeans in the early years of European exploration and settlement, in exchange for wine, rum, trade beads, and other goods. Europeans received cotton, muscovado bread, and animal fivers. Archaeologist Landon H. Fraychard (1997: 198) argued that the Windward Island Caribs "added commercial production to subsistence production" in reforming the trade. For example, the Caribs increased their production of tobacco in order to trade with the Europeans. It was through the use of alternative exchange that Caribs were first introduced to European alcohol. Portuguese explorers, sailors, and missionaries usually carried great stores of alcohol on their voyages. The Caribs received European wine and rum for their society, as well as their higher alcohol consumption. When Thomas Gage (c.1610-1680) and Richard (1601-1646) arrived in Guadeloupe in 1622 he was greeted by Caribs "some speaking in their unknown tongue, others waving signs for each other as we brought and they desired. Their signs for some of our Spanish wine was readily perceived, and their request was most willingly granted by our men." Father de Trazes called to the Leeward and Windward (1902: 131) reported that the Caribs had a strong penchant for French brandy, which they called "muscovado-bread." Father de Trazes (1967: 1071-1072, 1074) also wrote that traders could purchase great deal of cotton for a glass of rum *de mer*. The use of sugar making

trade item, rather than European goods increasingly more common as the Carib-European alcohol trade. By the end of the seventeenth century, the common Carib greeting is *Mahoupi* was "I'm thirsty!" (Lafit 1733:48-49; see also Lafit 1733:1-23).

Alcohol-the-gifts-to-a-guest rule is gift-giving customs that preceded trading. The generalist using alcohol as an enticement to trade was also common in the North American fur trade and West and West Central African slave trade (Ogden/Young 1997:43-45; Marshall 1995:40; Thomas 1981:66-67). Carib-European trading often began with a customary presentation of alcohol and the exchange of items. On the French *Griffin's* expedition to attack Spanish-Caribbean outposts in 1585-1586, Deriot's crew offered beer to Caribs of Bonaville prior to trading (cited in Hulse and Whiteland 1993:54). According to Lafit (1734:139-1734:140), giving the Caribs something to drink was "an infallible way to gain their friendship" and the Caribs of Dominica were without exception particularly well when he arrived "since it was accompanied by two bottles of rum." In 1732, Barbados ship Captain John Bartholemew described an accident in which his slave party was poorly treated and refused food and water from the Black and Yellow Caribs (cited in Hulse). According to Bartholemew (cited in Hulse and Whiteland 1993:173-174) "Immediately after [the refusal] I went on shore the ships boat with a mate, with rum, beef and bread, etc." These presents helped open lines of communication between Bartholemew and the Caribs.

Rum became an important item in the Carib-European trade because alcohol was central to a number of Carib ceremonial customs. From kula to death, alcoholic beverages permeated nearly every aspect of Carib society. Alcohol was at the core of Carib mythology and spirituality, which made it a deeply meaningful symbol of cultural identity. According to French Jesuit missionary de la Roche,

When they say about the origin of the sun, and about the creation, and generally about all water is like our own manner to do. First, The great master of Creation, who say those good spirits enjoyed epidemics toje that the Caribbees in that time were very wicked, said no longer allowed him remain, nor Ocean made it two many days such as great quantity of water that they were nearly all drowned

with the exception of a few who saved themselves in small boats and plunged on a mountain – which was the only one left.

(quoted in Malin and Whitehead 1992: 142)

According to Carib mythology, the Great Flood story – which explains the existence of the sea, stemmed from the Carib's failure to supply their spirits with drink. The story also shows how Caribs used alcohol to help explain the disastrous effects of hurricanes. They offered humans – in effect, a vehicle for controlling major events in Carib society. Caribs made offerings of alcohol to their gods, placing items on small wooden stools or their houses to appease and thank their *anaca* (gods) for good harvest (quoted in Malin and Whitehead 1992: 147). "When they have a great drinking party – which is their customary day, always put to one side as – celebration, get in some calabashes for the 'Gonzales'" (quoted in Malin and Whitehead 1992: 147). Just as Mohammed's vision of paradise included a river of wine, heaven in Carib mythology was a place where calashes flowed without ending.

Asian and European alcoholic beverages entered and permeated Carib drinking practices. For example, oral histories collected by anthropologist Douglas Taylor (1998) in the mid twentieth century highlight the use of rum in Carib spirituality. According to oral tradition:

coconuts and rum were placed on the tables (in the old days), on one end of the room where was completely dark. The women (olden) would sing and matter used the spirit for us with a blessing. The spirits spoke in strange voices and you couldn't tell what they were saying but you could hear like, *glou, glou* sound as they drink the rum. When the house stopped the offering appeared to be raised and went concentrated early in the morning – before sunrise. The spirits, I was told, consumed only the last of the offering leaving the rest behind.

(Taylor 1998 see also Malin and Whitehead 1992: 203)

Other Carib communities viewed the use of alcohol as vital of passage and transitional stages of life. For example, French missionary Expediton Besson observed the use of alcohol to ensure the successful birth of a child:

When the women are giving birth, the husband watches on from close, and they do not sleep together at all the first or on occasions from this point. And both only take a few, relative one of the most coldness – especially when they have a boy for the first child. The men drink more eagerly than the women for long than the women

should suffer by him. Father Raymond was at the house of La Barre (Carré) described as Dominick going to see one of these doctors, and as the Father was speaking to him of this his savage told him that some doctors entirely busy studying and getting for the first five days after the conclusion of their work, and on the other days dead the bones they take nothing but Ojibwa. After that they eat nothing but venison and drink Ojibwa for the space of a month or two.

(cited in Holm and Whithead 1992: 112)

Alcohol played an important role in communicating with and showing respect for the dead. In 1664, Laet (1870-194) can down to dinner with the Caribs and made the surface work of sitting on a Carib grave. Laet apologized, made a toast, and offered "drink... even to make amends for the offense we had given them in sitting on their dead!" In 1680, Patrick Leary Fortnet visited in Hudson's Bay (Holm and Whithead 1992:128): writing about the Dominick Caribs, reported "Drinks and burial are accompanied by numerous custom and superstition which are often occasions of celebration and dancing and the swallowing of enormous quantities of rum."

European settlement and aggression disrupted Carib society. The introduction of large quantities of rum into the context of epidemiological catastrophe accelerated the erosion of the family unit and traditional social structure. For example, Joseph Sarsfield, in 1776, describing family life among Dominick Caribs wrote:

Every individual having no inferiority or power over his Wife that he requires not but to destroy the slightest offence and it is to be feared that several families are often exposed amongst the Indian people especially when they are conversant with Spirituous Liquors which they are excessively fond of.

(cited in Holm and Whithead 1992:139)

Violence within Frederick Towns Mission shocked for the erosion of Carib society. According to Towns,

The Caribs in the family circle although they may have lost the good nature to escape the missionary, still violence in the man with the woman and the man with a bag of beauty under his arm. He had enough dignity and courage and behind him the purpled arms of an respectable Father. He might have held these hands longer but for the taste for rum.

(cited in Holm and Whithead 1992:177)

In Carib society, burying was replaced traditional drinks, but culture, Alcohol lost much of its spiritual, social and ceremonial meaning within the context of European conquest.

In the seventeenth century rum became a popular form of alcoholic stimulation at the margins of the Atlantic world. Although early rum making relied on molasses byproducts and small stills, it still bolstered sugar plantation revenues and reinforced sugar colonies. Rum sustained the growth of American trade and served currency for a new class of merchant capitalists on the American side of the Atlantic world. In the seventeenth century, Barbados emerged as the leading rum producer. Rum and other types of alcoholic beverages primarily fed local and regional demand, which was fueled by a variety of material factors and the general imperiousness of life on the Caribbean frontier. In the eighteenth century, rum making techniques improved and the market slowly expanded, especially on the British colony of Jamaica.



## CHAPTER 4 EIGHTEENTH CENTURY RUM MAKING

Salvay Morel (1745-47: 4) described Caribbean sugar production as a proto-industrial enterprise that combined the methods of factory and field. There is little doubt that this characterization understood (though not explicitly, the efficiency of an industry that turned its waste products into a highly profitable alcoholic commodity. In the eighteenth century, sugar planters experimented with new equipment aimed both at high rum yields and improved their rum-making techniques. They speculated about the potential impact of their still houses and left extensive records about distillation technology. Often, such speculation was based more on the optimistic perspective of an overconfident planter than on actual production figures. Despite the broad regional context of rum making at the beginning of the eighteenth century, French Caribbean sugar planters developed an especially sophisticated rum industry and pulled away from their French and Spanish rivals. Jamaica and Barbados, opened by large North American and metropolitan markets, emerged as the leading rum-making colonies. The following analysis explores the methods of Caribbean rum makers, especially in the French Caribbean, and discusses the basis for their opinions.

Eighteenth century rum making was an art, but it was an empirical art that relied heavily on general rules-of-thumb principles and the skill of particular distillers. Antiquary sugar planter Daniel Defoe explained

This art and having well-evolved principles for its basis, is founded solely upon experience. The nature of fermentation (which is particularly necessary to making rum) can be treated only by practice, and adjusted by touch, weight or measure, and even then great disappointment will happen in the distiller, unless from experience he differences of heat and cold, or from some other latent cause, can distinguish.

(Defoe 1746: 52)

Eighteenth-century cane-making lacked mechanisation and quality controls, but the economic pressure of non-sugar plantations to imitate the expenses of cane production and make it a more economically realisable

Numerous factors determined cane yields. At the most fundamental level, soil quality affected the amount of cane a plantation could produce. According to Jamaican sugar planter Edward Long,

in many places on the North-side [of Jamaica] the soil is so rich, the cane so vigorous and frequent, as to require rather to be suppressed than changed; and I am persuaded, that these lands would yield more sugar and of better quality, if they could be drained with sea sand; the spring here is so rapid, that it will not use less rate sugar, but these estates produce an extraordinary quantity of cane. The South-side is much on the contrary; produce a less proportion of cane, as a larger quantity of sugar, and as general I have observed, the best estates which afford the best proportion of cane, yield a sugar of the best quality and complexion. (Long 1774: 441–442)

And so, when a parallel Long (1774B: 75) wrote, “The land is general from its richness better fit for banana’s cane. I have seen some form of increasing cane and length, but such are unfit for making sugar and are only ground for the still house,” Jamaican sugar planter William Beckford (1790: 154–155) believed that sugar cane juice is the most important aspect of Jamaica cane for thick for sugar making, but well suited for producing rum. What Long and Beckford may have been interpreting was the impact of high levels of soil on the rate of the spontaneous ripening of Jamaica cane and reduce the necessity of ripening during sugar processing and increase the amount of molasses, as well as the level of sucrose in the molasses available for rum-making (Chabon 1961: 223; Thomas 1964: 109; Why 1961/191). However, the fermentation and distillation sugar cane juice with a high water content required great care because, according to French-Caribbean sugar planter Joseph François Champetier de Cangey (1781: 8), it fermented slowly and sometimes produced a “foam” upon. Other qualities of the soil, including nitrogen levels, acidity, and drainage, might also explain why the first few sugar cane crops in many newly colonised lands were used only for rum (Long 1774B: 79–105). Jamaican sugar

planter Leonard Why (1448-255-483) encouraged distillers to experiment with rum-making techniques and adjustments to the taste of their particular plantation.

Harshly and seasonally changeable governed rum yields. The tropical Caribbean climate consists of a wet and dry season and many planters worried about distilling in the wet season when the still house was likely to be cold and damp. Barbados plantation manager William Belgrave (1755-352) wrote, "I see no just Reason why [a] Still House should be stopping Rum in the wet Season of the Year when no good Fermentation can be expected or made equal to the Month between January and August." An anonymous writer in Saint Domingue noted that the best fermentations occurred in the dry months of March, April, and May (AA). Asa-Chapman de Cossigny (1781-4) believed fermentation was best in the "warmer" months. At a molecular level, alcohol and water have an affinity for each other. For example, when measured, alcohol is attracted to water in the blood and quickly absorbed into the bloodstream (Gibson 1995:19). Similarly, alcohol is a damp still house absorbs moisture from the air. That is an important catalyst for the conversion of sugar into alcohol during the fermentation process, is disrupted by the absorption of water and the temperature at which fermentation occurs decreases (Lock 1888:754-755). Thus, in the case of rum fermentation during the wet season, a damp still house slowed the rate of fermentation, which held up work rhythms, and too much moisture prevented fermentation altogether (Why 1448-255-483). In order to reduce moisture in the still house, American sugar planter Thomas Langley (1823-343) advised "The still-house should never be made so it so-called, that the warmth of it will diffuse through it, and dispel the chilly cold dampness of the fermenting part of the house."

Natural disasters such as drought and hurricanes, also had negative impact on rum yields. For example, in 1772, a major hurricane hit the Leeward Islands and England's rum imports from Antigua that year dropped 89% from the previous year (Boggs 1927:17). Hurricanes, which tended to hit at the end of the harvest, usually affected the following year's production. In 1780, Barbados was devastated by a hurricane and, the

Following year, cane production at Cambridge plantation, Barbados dropped 75% from the previous year (IPO). In 1763, plantation managers at Tupper's Hall estate, Barbados noted the loss of 400 gallons of rum "in the stove" and in 1761 the fall effect of the hurricane was felt as the value of the estate's produce dropped 40% (NPP).

In the Caribbean, sugar cane was harvested every year, usually in the dry season months of January-May. Sugar cane spoiled quickly so it had to be brought to the mill and processed of its juice soon after being cut. The cane juice was then boiled in large heated cauldrons. During the boiling process, impurities, known as *bagasse*, floated to the surface and were skimmed off. Lime, egg whites, and the blood of cattle were some of the ingredients added to the boiling juice just to help bring impurities to the surface (Holgersen 1793 [P. Storr Hall 66-67, 123). The skimming process continued as the juice was conveyed through the series of successively smaller cauldrons. Once the sugar boiler believed the juice had reached an appropriate viscosity, it was then transferred to four large earthenware sugar molds in the purging house. The remaining impurities, or the *gross* called *molasses*, drained off leaving a barrel of still wet molasses on a lowwood leaf of sugar. Drying, a more extensive practice in Barbados and the French Caribbean, consisted of rapping the sugar mold with wet clay. Drying meant the sugar leaf of wet molasses had left a lighter semi-refined sugar.

Rain began to wash compound and the washed-out raw cane ingredients were molasses, dregs, and water. Some from the boiling cauldrons in the boiling house was carried in buckets or placed in pans or where a filtered cane burning system in the still house. The art of skimming was a specialized skill and planters often worried whether the sugar boiler responsible for skimming skimmed too deeply. Poor skimming techniques increased sugar, rather than just the impurities, which decreased the amount of sugar produced. This concerned Jamaican sugar planter Bryan Edwards (1819 [1834]) to warn "the boiling house is defrauded of the cane liquor by improper skimming." As with some, the molasses that drained from the sugar molds and barrels in the purging house was

carried to buckets, or dropped into gutters that channelled it to the fermenting vat where the mill house. Chasing further jugged the sugar and provided more moisture for rum making. An estimated percentage also increased the amount of molasses available for drinking. Doubtless, the means of previous distillation – was the fluid ingested and it is simply the waste removed of much of its mol matter. Water was the fourth ingredient and there appears to have been no special treatment of water, although some planters may have preferred to not “put going waste” (Long [1742] 2007 see also Charnock 1985, Gibbons 1761: 128).

The straw and molasses used in the wash were sometimes augmented by pure cane juice. During a visit to the Caribbean, physician Dr. Hans Sloane (1787 2014) observed “that a made of molasses and first make sugar.” These casks were called “rum-casks” and they were casks, which usually because of some accident, were set aside for rum-making. For example, in 1798, Frenchet (1790 2014) not made “rum-casks” that had been damaged by rats. Harmeren, drought, fire, and other disasters damaged sugar casks and made them suitable for rum-making, but they were often lost for the mill house (see also Ferguson 1793: 145). Sherbrooke cited in Hall 1982 464. Occasionally other ingredients were thrown into the fermenting wash. John Bayly (1848 cited in Dunn 1972: 197), a visitor to Jamaica, wrote that sometimes “the cane-stems would creep has mingled about,” but the purpose was apparently to keep the slaves from eating it.

The proper amount of ingredients in the wash prevented a lengthy fermentation for years, which are naturally present in the sugar cane, to three and breakdown the fermentable sucrose into alcohol. The usual fermentation took about one day. After that, addition of molasses further stimulated fermentation in the wash. While fermentation could occur within a few days – usually eight – some molasses could ferment for several weeks (Hobbes 1763: 56, Gray 1848: 404). Yount noted in the rumen sucrose was put out or when the level of alcohol in the wash reached about 14% (Gibbons 1982 72, 8). Fermentation lasting out to two weeks at a mild temperature was considered most optimal

because it increased the greater over-crowd of roots was avoided (Wray 1848:400-401). Planters knew how to increase the length of forest roots by manipulating the proportions of ingredients in the work, especially by the addition of cold water to slow the process. During fermentation, the mud formed and solidified and was often described as a living organism. According to Ransphey (1821:174) "which swell like particles, or small globules appearing on the surface of the liquor, or rather when surface showing itself indicated that fermentation had ceased in the fermenting cisterns" (Harris (1765,55) described air globules with a "very weak [low vapour]" smell, unlike those which arose with a "bad [high vapour]" smell.

Once the mud settled, the sour smelling compound was "ripe for distilling," by the action of heat, distilling vapours were divided and lighter substances at the top, and heavier work. This process removed water, salts, fixed oils, and other impurities that affected the proof and taste of the rum. The alcohol vapors collected in the still head and left through the coil where the vapors condensed and flowed out and where a receiver at the other end of the worm. After the first distillation, the liquid was a poor quality wash (spirit called *low wine*). Although plantations could end the process after the first distillation, most British Caribbean distillers appear to have re-distilled *low wine* or *wash*, either separately or by returning them to the processing wash. The second distillation removed more impurities, improved the taste, and increased the alcohol content of the rum. The second distillation reduced the total amount of *low wine*, but was necessary to make concentrated rum of a high proof.

In 1755, Belgrave (1755:20-22) wrote "The Distilling House should have three stills to contain 900 gallons of Liquor, and a strength big enough to contain the low-wine produced from the first still." By the end of the eighteenth century, Spanish Caribbean distillers were using even larger stills. For example, Starnes (1819:26-27) believed that plantations should employ stills of 1,000-1,500 gallons and wrote "A still of cap

thousand gallons, with freight and charges, it did not include more than one of one thousand-five hundred gallons, and a trader worked with but little more fuel.” Edwards later indicated that the average plantation would be more likely to possess two mills, one of 1,200 gallons and a smaller one of 600. In contrast, French distillers appear to have continued their seventeenth-century pattern of relying on small, outposts mills. In 1786, a series of articles published in Saint Domingue’s main newspaper, *Journal Américain* described the use of 300 gallon mills of an oblique design. The anonymous author (J.A.) complained that, in order for French Caribbean distillers to successfully compete with British Caribbean rum producers, they would have to follow the practices of British Caribbean distillers and increase the size of their mills, lengthen the necks of their still heads, and increase the length of their cooling coilers.

Rum has highly volatile fuel and less of alcohol due to evaporation was a major problem for distillers. “Why (1844-45) argued: “The great object of the distiller is to produce as much rum from the available sugar, molasses, or as little as possible of it by evaporation” (see also Chevalier de Cossigny 1761: 4). The evaporation of alcohol began during the fermentation process, which led to design changes in fermenting vats (Morris 1763:34). For example, the low flat fermenting vats of the seventeenth century gave way to larger vaulted fermentation vats that were wide at the bottom and narrower at the opening. This design decreased the amount of air reaching the wash and, therefore, reduced evaporation. According to an anonymous author (J.A.) in Saint Domingue, “The form of the press of grapes [the fermentation vat] has to be a truncated cone: very large at the bottom and smaller at the top to make a quicker and better fermentation.” Fermenting vats, and for that matter all the vessels used in rum making, had to be thoroughly cleaned after every run. After wash washing had ceased, to prevent them from causing the run (Morris 1763:55).

The threat of evaporation continued after distilling. Despite the use of well-sealed “tight casks,” about 10% of rum shipped from the Caribbean to Britain and 1% of rum

slipped from the Caribbean to the North American ballist way of respiration during the voyage (McCook 1989:821). In some cases, a small creek meant that rum production ceased as the distillation was completely empty.

### *Sorting the Work*

The work was the third important stage in rum making, and the combination of ingredients determined the amount of alcohol the wash produced. In fact, all of the alcohol made on Caribbean sugar plantations occurred at this stage and distillation merely extracted it from the wash. The proper mix of ingredients produced high rum yields and optimal flavors, perceptible with plantation efficiency. Struggled to construct high-yielding wash compounds, Isoupe took like Indian valuation systems, ginger yields, and rum yields sometimes listed wash compounds. But, in general, distillers tended to hold tight to their systems and associated role of French methods from competitors. An examination of plantation records reveals systems about the wash that were lost in some colonial plants, as well as modern historians who have overestimated the amount of rum that could be produced on Caribbean sugar plantations.

Edwards wrote extensively on the wash compound and the observations provide valuable insights into the art of eighteenth century British Caribbean rum production. Many historians have used Edwards' descriptions of the formula and industry to understand rum making and estimate the potential rum yields of sugar estates (Kupperberg 1989:46-70; McCook 1989; Farnborough 1979). Edwards (1719:II 275-280) argued that the average 100-gallon wash in the British Windward Islands contained equal parts water, sugar, and water. After fermenting 24 hours, distillers added a three-gallon charge of molasses a day or two later; distillers added a second three-gallon charge of molasses on either a further immediate fermentation. The practice system proved among rum distillers on the British Caribbean and was not confined to the Windward Islands. For example, in 1774, Long (1774:II 360-86) noted that distillers on Barbados produced the same equal three parts



method from the Maritz (1655-56). However, in 1754, Edwards wrote that the equal three parts wash was becoming an accepted method in Germany and presented in *Expositio* the “improved Jamaican wash compound” (see Table 5-1). In this new method, the average 100-gallon wash contained 30 gallons of dander, 6 gallons of molasses, 36 gallons of water, and 8 gallons of yeast. The difference is, of course, the use of less water and more dander.

Table 5-1. General wash proportions related to original Jamaican wash proportions

General average wash	Improved Jamaican average wash
33.3 gallons dander	30 gallons dander
33.3 gallons dander	50 gallons dander
33.3 gallons water	8 gallons water
6 gallons of molasses	6 gallons molasses
100 gallons wash	100 gallons wash

Source: Edwards (1819) 279-280; Long (1754) 340-341; Maritz (1655-56)

Colonial physicians, including Edwards, recognized that something inherent in yeast and molasses fermented to make rum. They referred to the concept of *essence*. The use of this term suggests that they knew rum was produced from the breakdown of molasses as the yeast and molasses added their some other property or capacity to cost yeast. Why they used the term *essence*, instead of sugar or molasses, Flannery recognized one fundamental principle for the wash compound: that it must contain 30-32% essence. However, it appears that most rum makers opted as an average of about 12% (Belgrave 1733, 26; Edwards 1819 1:343; Roughley 1823:381; Way 1844:280). Molasses was the standard for yeast to and one gallon of molasses was considered equal to one gallon of yeast. Yeast, on the other hand, represented some fraction of molasses. Edwards, for example, argued that the ratio of yeast to molasses was 4 to 1. Thus, the average 100-gallon wash of 6 gallons of molasses and 36 gallons of water provided the necessary 12% level of essence.

According to Edwards, a plantation usually producing 300 hogsheads of sugar in 16 cwt. (long/hundredweight) covered 30,000 gallons of water and 12,000 gallons of molasses for the still house. Based on the 4:1 ratio of yeast to molasses, the plantation produced 18,000 gallons of yeast. From this rum molassesness, Edwards calculated

that the distillation of ten casks (1,200 gallons) would produce 500 gallons of a poor quality weak spirit called low wine. The process was repeated making a total of 600 gallons of low wine. Distillers retained 70 gallons of "weaker spirit" in the low wine barrel for the subsequent distillation while the remaining 530 gallons of low wine was re-distilled as a weaker alcohol, specifically made for home distillation of low wine to produce 220 gallons of proof rum containing 50% pure alcohol. However, in the final analysis Edwards slightly overestimated the rate of rum yielded to 113 gallons of rum per 1,200 gallon cask, rather than 110 gallons. "Three two hundred and twenty gallons of proof rum are in fact, made from 530 gallons of low wine, or about 113 gallons of molasses rum discount two hundred of waste." Using Edwards' figures for the availability of molasses and molasses, and maintaining the principle of 12% recovery, there were enough molasses to make 1117 weaker. Edwards concluded that this level of recovery made 54,720 gallons of low wine, which was re-distilled to produce 14,412 gallons of rum for a rate of 4.5 gallons of rum per cwt. of sugar.

However, some problems arose when Edwards calculated rum production at the plantation level. According to Edwards, good soils produced rich sugar cane capable of producing 32 gallons of rum per 16 cwt. headsload of sugar. Edwards' plantation therefore would have produced 10,400 gallons of rum or 5.1 gallons of rum per cwt. of sugar. However, Edwards believed that 220 gallons of rum per three headsloads of 16 cwt. sugar was more typical. The estimate produced 10,133 gallons of rum, or 4.7 gallons of rum per cwt. of sugar. For, as noted above, the weak model Edwards constructed based on the availability of rum and molasses produced 14,412 gallons of rum for a rate of 4.5 gallons of rum per cwt. of sugar.

In the only modern study to seriously address colonial rum-making on the New World, economic historian John McCusker designed a new system for estimating levels of rum production. McCusker developed models for each Caribbean island and Puerto

America to create an economic picture of nations in the Atlantic world between 1768 and 1773, just prior to the American Revolution. McCusker explained British-Caribbean trade relations and the impact of the cane trade on the balance of payments of the thirteen colonial colonies. McCusker attempted to reconstruct accurate accounts of British-Caribbean cane output from sources other than British export figures, which, as McCusker pointed out, greatly underestimated actual levels of cane production. According to McCusker, earlier commentary on actual production based on these sources, limited as it was, amounted to nothing more than educated speculation. McCusker's research has provided important insights into the dynamics of cane-making trade launched prior to further research.

McCusker's model has gained acceptance among many scholars who have succeeded in establishing accurate levels of New World cane production (Coughley 1983: 61; Drescher 1977: 110-114; Diaz 1995b; McCusker and Menard 1983: 144-146; Rumbaut 1979: 113; Schwartz 1985: 161-162). According to McCusker, it is possible to determine the workability of colonies by knowing the type and amount of sugar as actual produced. In addition, McCusker believed that it is possible to determine the amount of cane produced from that colonies by knowing the distilling techniques employed. The model also used standard sources for the loss of sugar, molasses, and rum from leakage, smuggling, and per capita consumption. It also took into account assumptions about the quality of cane from different colonies. However, a review of previous models and cane-making maps indicated that McCusker's fixed models underestimated levels of cane production and obscured the dynamic reality of cane-making. In short, there are simply too many variables affecting the amount of cane a sugar planter might desire to construct good comprehensive models of New World cane production.

American cane-making, based on Edwards' formula, was a key element in McCusker's design. In Jamaica, McCusker challenged Edwards' figure and developed a new model for determining potential levels of cane production. McCusker's research began to revitalize Edwards' work calculations and overall level of output. McCusker correctly

pointed out that, using Edwards' most optimistic, the planter would run out of acres before his palms had made enough work to produce a ratio of 4.2 gallons or 4.5 gallons of rum to cwt. of sugar. In fact, using Edwards' much-compromised, a sugar plantation of the size and specifications that Edwards identified would only produce about 62 weeks of 1,200 gallons, which – based on the ratio to determine rum rates, only produced 2,094 gallons of proof rum, or 2.5 gallons of rum per cwt. of sugar.

In an attempt to fix the error, McCusker reassessed Edwards' much-compromised McCusker reassessed Edwards' figures for the availability of acorn and molasses. He argued that the average Jamaican would most have consumed 12 gallons of acorn and 10 gallons of molasses. The ratio of acorn and molasses still provided the work with the necessary 12% level of recovery. As a result, McCusker's model had enough acorn and molasses to make 100 weeks and 11,300 gallons of rum. For a plantation making 300 tons/year of sugar at 14 cwt, this produced a ratio of 3.5 gallons of rum per cwt. of sugar.

According to McCusker, the "documented" level of rum production/acre/year Jamaican plantations supported the 3.5 gallons/ratio. Although not explicitly stated, the ratio also reflected Long's estimate of Jamaican rum production for the period 1768-1772, the period McCusker was most interested in explaining. Long (1774) (1324-1329) equated a typical Jamaican plantation of 300 acres produced 3.37 gallons of rum per cwt. of sugar. Within the same paragraph, Long also wrote that Jamaica as a whole produced 3.43 gallons of rum per cwt. of sugar. Thus, the revision of Edwards' most compromising reflect McCusker's attempt to match Edwards' rum production figures to those given by Long for the period 1768-1772.

McCusker's revisions were based on Edwards' statement that a 1,200-gallon work produced 100 gallons of rum. McCusker simply multiplied 100 gallons of rum by 100 the number of weeks available using the new work ratio. By doing so, McCusker arrived at 11,300 gallons of rum for a ratio of 3.5 gallons of rum per cwt. of sugar. However

McCusker's model overlooked the amount of some 3,500 gallons of low water. By following the steps of converting the wash water to low water and the low water into rum, McCusker would have realized that the 3,500 gallons of low water returned to the low water, but produced another 1,433 gallons of good rum. The additional rum would have increased the total amount of rum to 12,433 gallons and produced a ratio of 3.9 gallons of rum per cwt. of sugar.

Table 5-2. Proportion of wash ingredients during the distilling cycle at Park Grove, Jamaica, 1774 in gallons

Weeks	Molasses	%	Sugar	%	Gender	%	Water	%
2/11-2/18	825	8	11,300	68	4,500	26		
2/18-3/5	1,278	13	3,200	33	5,150	53		
3/7-3/12	1,888	34	4,400	32	7,800	58		
3/14-3/19	1,605	33	4,330	27	9,200	64		
3/21-3/26	3,328	33	4,500	24	11,500	68		
3/28-4/2	3,578	36	3,780	15	11,700	67		
4/4-4/9	1,687	7	3,750	6	19,000	87		
4/11-4/16	1,468	9	3,300	20	9,400	58	3,000	12
4/18-4/23	1,518	36	2,400	23	5,600	39		
4/25-4/30	1,088	9	4,330	36	6,400	58		
5/3-5/7	1,398	31	3,650	31	7,500	58		
5/9-5/14	1,058	35	2,400	18	9,000	67		
5/16-5/21	1,595	37	3,450	13	8,000	70		
5/23-5/28	1,388	83	400	4	8,100	74	1,000	9
5/30-6/4	8	8	0	8	8,000	75	3,000	27
6/6-6/10	500	6	0	0	4,500	31	1,000	12
Total	33,487	31	46,670	23	136,740	65	9,000	3

Source: GHP.

More importantly, however, McCusker's model simply reflected an inherently weak proposition throughout the course of the distilling cycle: which washed ingredients and refined rum yields. Settling a weak rum is a dynamic process because the proportion of ingredients regularly changed throughout the distilling cycle. In fact, a weak could be made

with a willow-wood or willow-bud, sometimes, double-wood was fermented (Wang 1492: 205-207). The addition of water was sometimes necessary and some plants were used entirely again or less (Wang 1492: 403). Because the distilling cycle consisted with, and extended beyond, crop-over, the ideal storage properties of most ingredients were rarely observed on a week-by-week basis. For example, steam was abundant at the beginning of the sugar-making cycle, but ran out after the sugar-boiling ceased. On the other hand, molasses, a limited supply at the beginning of the sugar-making cycle, was abundant at the end. Therefore, let Martin so write,

When the usual flower fruit [at the beginning of the crop] and the boiling-house affords steam in abundance, this much of the molasses molasses should make the composition. On the contrary, when there is but a scanty supply of steam, the quantity of molasses used be increased, and when nearly none there is want of all molasses with water and change part of two [blended] must make the composition. (Martin 1763: 21-22)

The daily still-house records from York Estate, Jamaica, as well as the many wash recipes found in a plantation century account, highlight the dynamic nature of wash composition over the course of the distilling cycle (Tables 3-1 and 3-2 through 3-6). Moreover, experiments with wash recipes led to regional variations among plantations, as well as changes in wash proportions over time.

Table 3-1. Proposed method of making a 100-gallon wash at Rockingham, 1733.

Crop Cycle	Molasses	Steam	Double	Water	Total
Beginning	0	40	0	40	100
	8	32	30	30	100
Middle	1	30	30	15	100
	7	40	40	13	100
End	10	40	25	25	100

Source: Ridgeway 1733:26.

Table 3-2. Proposed method of making a 100-gallon wash at Great Domingue, 1734.

Crop Cycle	Molasses	Steam	Double	Water	Total
Variable	30	120	120	30	300
	24	120	150	30	300
	30	90	90	90	300
	30	100	90	80	300
	30	110	90	70	300
	24	120	100	56	300

Source: RA, 1734.

Table 2-5. Proposed method of making a 100-gallon work in January, 1793

Crop Cycle	Molasses	Sugar	Cumbar	Water	Total
Beginning	0	55	0	50	100
End	0	30	30	30	100

Source: Folgerman 1793:32

Table 2-6. Proposed method of making a 100-gallon work in January, 1823

Crop Cycle	Molasses	Sugar	Cumbar	Water	Total
Beginning	0	40	30	15	100
End	15	0	30	35	100

Source: Roughley 1823:187

These examples show that Edwards' model simply expressed in aggregate average work (imposed) that was nearly unworkable in daily life. McCook's stress on losses to Edwards' average work proposition, as well as to his own 12.00 value of sugar in molasses, overlooked the fact that the work proposition was dictated by the availability of molasses/molasses, which changed throughout the course of the distilling cycle. McCook applied a modified work proposition as a work-to-work basis, which limited the number of workers to 100 and reduced level of rum produced. In addition, by trying to correct the overconsumption in Edwards' model, McCook constructed a new model that overestimated the role of molasses and undermined the role of rum in rum making. By doing so, McCook estimated some 11,000 gallons of rum from the rum making equation, which, using Edwards' estimates, equaled another 2,200 gallons of molasses, or 1,776 gallons of rum.

There are other variables that must also be taken into account when accounting work components and levels of rum production. For example, although planters agreed that the interest of workers in a work should range from 10 to 100, they disagreed on the percentage of the work that was molasses scheme that level. For example, Folgerman believed that 6 gallons of rum were equal to 1 gallon of molasses. However, Folgerman wrote:

For although it has been estimated that 6 Gallons of Molasses is equal to one Gallon of Molasses, yet this is not so throughout every Month, sometimes four sometimes six, and I have even known eight, which Discovery must be made from the Quantity of Spirit extracted. Now be it also observed that there is a great Difference between a weak and a fine boiled Sugar, or Sugar boiled very light, and that which is boiled very low.

(Folgerman 1793:32-33)

In India, sugar planter William Farnsworth (1793-52) also argued "Five gallons of skimings is thought will be found to contain sweet equal to one gallon of pure molasses." Roughley (1823-1881/1891) believed that, in terms of sweetness, 8 gallons of scum equaled 1 gallon of molasses. In another instance, Wray (1848-1901) argued that 8-10 gallons of scum were equal to 1 gallon of molasses. It is unlikely that Roughley and Wray were indicating that Jamaican scum had become less sweet, or that Jamaican molasses had become sweeter, as the years went. Edwards described Jamaican scum production. Not unlikely that Belgrove and Farnsworth were suggesting that Barbadian and Indian scum was inherently sweeter than the scum drawn from the long-run molasses in Jamaica.

The varying ratios of scum to molasses very important fact about rum production, that molasses is the key ingredient in rum making and it is the fundamental determinant of the amount of rum a sugar plantation produced. Rum is produced when the volume of yeast breakdown fermentable sugars – not scum or molasses – in molasses and scum are entirely relevant delivering the sweets to the still house. Coloured planters struggled to explain this fact using the term *sweetness*. They made varying estimates for the ratio of scum to molasses because soil quality changed from year to year and from field to field, which greatly affected levels of sweetness in sugar cane juice (Barnes 1966: 181-182; Davidson 1791-96). Further, the processing techniques of colonial sugar industries, such as steeping, as well as the skill and agenda of the particular sugar brokers and distillers, influenced the amount of sweet available in scum and molasses. These factors explain why, in terms of sweets, sometimes 4 gallons of scum and – other times, 10-gallons of scum equaled 1 gallon of molasses. In the case of Jamaica, McCutcheon accepted Edwards' 6:1 ratio, but overlooked the key fact that, as one Wray's (1848-1901) wrote, "On the quantity of sugar contained in the wash, therefore, is the quantity of alcohol dependent."

Instead of placing the emphasis on molasses, McCutcheon should have been fixated on the concept of *sweetness*. The level of sweetness determined rum yields – not scum and



molasses. Using the standard of events, Edworts' original estimate was accurate. Edworts argued that, 23,000 gallons of rum and 11,000 gallons of molasses produced 10,400 gallons of rum. Assuming the 12% principle, there were enough events to produce 13,177 gallons, which in turn produced 24,730 gallons of low rum. The low rum in turn produced 19,402 gallons of rum for a ratio of 4.3 gallons of rum per cent. of input, a full gallon more per cent. than that produced using McCusker's model.

In summary, while Edworts estimated that a sugar plantation producing 300 bushels of sugar at 10 cwt. produced 4.3 gallons of rum per cent. of sugar, McCusker devised a new method for calculating rum yields that resulted in only 3.3 gallons of rum per cent. of sugar. However, McCusker's new model failed to account for the 3,500 gallons of undistilled low rum. It also greatly reduced the average work proportion (one work is worth four) which limited the number of workers to 300 and further reduced rum yields. Moreover, McCusker's new average-work scope overestimated the use of molasses and removed a considerable amount of rum from the rum-making equation. Although the new model corresponded well with levels of rum production "observed" by Long in the period 1764-1772, a work proportion method based on the level of events would have been more appropriate.

#### Rum Yields and Rum-Making Efficiency in Barbados and Jamaica

In the eighteenth century, Barbados and Jamaica emerged as the two leading rum producers in the Caribbean. A comparison of these colonies is table 2. Following two contrasting approaches to rum-making, the differences reflect distinct economic strategies that highlight broader themes of economic efficiency. Analysis of these two colonies also offers insights into issues of rum quality and further exposes the weakness of trying to build comprehensive models of rum production.

Sugar planters in Barbados clearly expected to produce a greater proportion of rum and believed that high rum yields were well within their grasp. Long estimated that sugar

planter in Barbados could expect to sell about 4.3 gallons of rum per cwt. of sugar – not covering the cost of the subsistence of the planter(s) which represented a level comparable to that proposed by Edwards for Jamaica nearly a century and a half later. Even more astonishing, an anonymous writer in Barbados in 1737 believed that without 30 gallons of rum per cwt. of sugar was common. *Boligro's* also put estimates in the double digits. The Barbadian expression for high sugar-yielded sugar is to conclude that Barbadians “don’t themselves the best disposition of the sugar estate” (Martin 1768: 20). Plantation accounts from Codrington and Turner’s Hall areas confirm that Barbadians achieved high rum yields and exceeded those from many Jamaica estates (Figures 6-7 and 6-8).

**Table 3.3. A comparison of expected rum yields in Barbados and Jamaica**

Source	Years	Island	Gallons of rum per cwt. sugar
Richard Ligon	1697-1698	Barbados	4.3
Jacquesneau	1717	Barbados	4.3 (20.8)
Richard Hall	1749	Barbados	9.1
William Boligro	1735	Barbados	13.3 (16.6)
Edmund Long	1756-1772	Jamaica	3.7 (3.6)
William Beckford	1790	Jamaica	4.0 – 5.8
Robert Edwards	1794	Jamaica	4.2 (5.1)
Thomas Slaughter	1813	Jamaica	3.6

Sources: Jacquesneau 1735 II:348; Beckford 1794 (xxx: 146); Boligro 1735:44; Edwards in Pe B 284-285; Long 1756:12-13; Ligon 1697-1698; Long 1776 II:228-229; Long 1774 II:496; Slaughter 1813:168

The Barbadian penchant for claying sugar is largely responsible for the higher rum yields. An unseasoned worker, claying consisted of carrying the sugar molasses with wet pans of clay. It touched not more molasses than pugging alone and produced a “white and more refined sugar loaf” which was in high demand in the British market. Clayed sugar took several weeks longer to produce and, as a result of protests from British sugar refiners, paid a much higher export duty than muscovado. However, because of the higher price of clayed sugar and the additional molasses for rum making, claying was profitable and Barbadians increasingly produced clayed sugar. In 1690 Barbadians clayed 33% of their sugar and, in 1740 that figure rose to 58%. By 1776, Barbadians were claying 72% of their sugar (McCluskey 1986:206). Claying was especially common on larger estates. For example between 1734 and 1756, managers at Codrington estate clayed 83% of their sugar

sugarcane (JPC). In contrast, Jamaicans rarely shaped their sugar and were content with exporting large amounts of raw, uncrushed full of molasses (McCarter 1989:152). Rogers (1963: 86, 105). The lower weight of shaped sugar and the increased availability of molasses for use in cooking largely explains the high raw to sugar ratio in Barbados.

McCarter endorsed a theme developed by Caribbean historian Frank Waddy Parris (1967) and argued that the Barbadian preference for shaping reflected an economic approach to sugar cane agriculture. According to McCarter:

Perhaps the most important consideration is the decision of raw producers to devote greater energy to shaping sugar than the molasses that is traditionally associated with the molasses available for the distilleries of rum. In this way, as in many other things, he differed from his opposite on Jamaica. The planter of Jamaica, faced with numerous acres of fertile land, engaged in extensive agriculture. He was the free farmer. The planter of Barbados, faced with little sugar land and restricted to three or four with declining productivity, devoted his talent, strength to increasing his distilleries as part of intensively farming his cane. The Jamaicans were careless in the management of their sugar land, as we have observed, allowed their cane to mature still heavy with molasses. The Barbadians, interested in such efficiency as possible, harvested each crop, and washed almost all of it to rum.

(McCarter 1989:115-116)

Barbadians were competitive, skilled, and efficient sugarmakers and rum-distillers who produced high quality products. A re-analysis of Tate's 1960's calculations highlights the economic efficiency of Barbadian and Jamaican sugar planters.

It was generally estimated that a Jamaican bushel lost 25% of its total weight in shipment to Britain (McCarter 1989: 138-142; Wemy 1888: 333-364). Thus, the 18 cent, 4750 lbs bushel of muscovado sugar described by Tate's in Jamaica contained over 360 lbs of molasses. This molasses, which could have been distilled into rum, dressed a very strong rum. However, the data also shows that the Jamaican muscovado arrived in Britain looking like shaped sugar. Even after the 25% loss, British sugar refiners still complained that Jamaican sugar was crude and difficult to refine due to the high amount of molasses still in the sugar (McCarter 1989: 139).

Every 142 lbs of muscovado sugar produced 130 lbs of shaped sugar (McCarter 1989:93-94, Goodwin 1977: 191). This was 42 lbs expressed molasses, which the Barbadians called down rum. Thus, for example, a plantation making 100 bushels of

estimated sucrose content sugar at 16 cent. (1792 lbs) and 10,000 gallons of non-produced 4.25 gallons of rum per cent. of sugar. However, if the same plantation stayed its sugar and increased the weight of molasses then that plantation would have only produced 6.4 bushels of sugar and, thus, 9.14 gallons of rum per cent. of sugar. In fact, subtracting the sum total of the sugar weights from Filmer's total would have increased the rate of 4.5 gallons of rum per cent. of sugar to 4.8 gallons.

In Filmer's model, the 304 bushels of sucrose weighed 700-800 lbs. Had that sucrose been stayed, Filmer's would have received 200,740 lbs. (141 bushels) of 16 cent. of stayed sugar and 100-800 lbs. of molasses. How much more rum could that molasses have produced? One simple approach is to base rum production on the weight of molasses. A gallon of molasses weighs about 11 lbs and it was widely accepted that a gallon of molasses could make a gallon of rum (Macoyman 1737 B 542). Thus, the 100-800 lbs. of molasses would have provided the still house with an additional 9-800 gallons of rum. The increasing amount of rum and the decreasing weight of stayed sugar would have boosted Filmer's total to 18.7 gallons of rum per cent. of sugar.

There are, however, other ways to determine the potential amount of rum from the 100-800 lbs. of molasses. According to Wray, a gallon of "common average molasses" contained 68% sucrose. On a less exact, it could mean as the molasses sugar content is known the sucrose content of molasses the molasses represents a gallon weighing 10-977 lbs. of which 7.138 lbs. is sucrose and the remaining 3.842 is mostly water. If we accept Wray's estimate of molasses at 68% sucrose, we should be able to show, based on Wray's calculations, 5.61 gallons of rum for every 100 lbs. This would have produced another 6-800 gallons of rum raising Filmer's total to 9.8 gallons of rum per cent. of sugar. Yet, there is even another more technical way to determine the potential of the molasses for use in rum making. According to *British Sugar Company (P.) Manual Book* (1897) one gram of sugar can produce under almost ideal conditions 0.6444 ml. of absolute alcohol. Thus, 100-800 pounds of molasses containing 68% sucrose could

produced about 5,000 gallons of alcohol alcohol, or (1600) gallons of proof rum making Edwards' rum to 11 1/2 gallons of rum per cwt. of sugar. Thus, half-claying became a common practice. In Jamaica, the rate of rum to sugar making has been similar to that achieved by rum-makers in Barbados, to name. Jamaican planters maintained a low-efficient system and accepted a reduced to valued rum production.

Another sufficient practice of Jamaican sugar planters distilled to lower rum to sugar ratios as evident in the length of the pumping process. The molasses run-off of molasses was watery material that contained little rumor. According to an anonymous British Caribbean sugar planter in 1752,

Molasses contains besides its gross saccharine part, a truly medicinal one, taken at the bottom of the cisterns which it is kept in, a considerable quantity of gross rum sugar is usually extracted. There are three sorts of this liquid: differing from one another in degree of purity: the most impure is that which flows from the materials and is contained in the cisterns of the boiling house: such a degree from the moulds before claying is considerably purer: and that discharged after claying has been found to be the purest of all.

(Anonymous 1752:29)

The Barbadian practice for claying, therefore, produced molasses with a high level of rumor, while the experiment pump time in Jamaica produced a weak molasses that contained less rumor. The Jamaican method contributed less rumor to the wash and as a result, Jamaican rum makers received less rum per gallon of molasses. In contrast, the molasses separated from the clayed and unclayed proper Barbadian sugar would have increased levels of rumor in the wash and produced greater quantities of alcohol.

Many Caribbean sugar planters also believed that the high rum yields in Barbados reflected a problem common to Barbados of sugar leeches. According to a deeply into the boiling sugar plant (Anonymous 1737, B 244; McCarter 1986:218; Roughley 1823 352-353). According to Marks,

The leeches [Barbadians] in the art of making such strong rum from their neighbours' great molasses sugar; that they distilled the boiling house and so by distilling the quantity of sugar: they easily increase the quantity of rum: which by no means is consistent, and therefore all such rum must be purchased by strict prohibition: and nature inspection.

(Marks 1718 54)

Labrousse (1984:235) referred to this practice as “feeding the feeding beast by ‘improper’ accounting.” McCusker (1985:244) also accused sugar leaders in Barbados of overstating the “domestic consumption.” The basis for McCusker’s suspicion was that, because rum could be sold locally to help pay plantation expenses, Barbadian plantation managers had a propensity to “sell” their domestic production of sugar at lower of increased rum production. Others suggested that, because plantation managers were often paid in rum, they increased rum production and trying to capture their salaries. For example, an anonymous (1753B:244) writer in 1753 warned the plantation of St. Kitts: “For the overseer, who gets his wages upon the sale of his rum, the pleasure of making a deal of rum will be sure to do it, that he makes the best sugar.” However, Barbadians put a great deal of time and effort into refining their sugar and producing as much as they could. As early as the 1640s, Leves (1657:52) referred to the careful process of re-boiling molasses to achieve production levels greater than sugar. McCusker’s assumptions were largely based on the experience at Collingwood plantation: a plantation run by a group of absentee administrators for the Society for the Propagation of the Gospel in Foreign Parts. McCusker may have assumed absentee ownership was characteristic of the Barbadian plantation class, yet, as discussed in chapter 3, Barbadians had a strong tradition of personally kept slave fields and highly motivated slave plantation production. It would, thus, have been more likely for the Antigua leaders to produce cheap and “improper” rumming.

Nevertheless, Edgewood estimated that sugar leaders in Dutch Hall consumed 10-4 gallons of rum per cwt. of sugar, while leaders at Edwards’ model plantation consumed 8-8 gallons of rum per cwt. of sugar. If these estimates are representative, then sugar leaders in Barbados consumed cheap – but only received 1-6 gallons of rum per cwt. of sugar more than their Antigua counterparts. At the same time, Edwards could have expensively rummed as much as 223 gallons of rum from his model plantation. Cheap rumming, therefore, would have only increased rum production at Edwards’ plantation

from 4.5 gallons of rum per cwt. of sugar to 6.7 gallons. This is probably not substantial enough to characterize Barbadian plantation managers as wasteful.

The next was the most important stage in rum making and the proper role of impurities produced legitimate yields. Barbadian distillers experimented with new wash recipes and appear to have developed advanced wash compositions independent of Britain. For example, the wash recipe consisting of three equal parts wheat, barley, and Rye has an average wash proportion typically used among early rum distillers in the British Caribbean. Yet, as Edgworth (1795:26) references this method as the “ancient Practice” at Barbados and proceeded to describe a variety of complex local wash recipes. In 1774, two decades after Edgworth’s observations, Long noted that Jamaican distillers employed to produce their “secret” method. It was not until 1794, nearly 40 years after Edgworth’s initial reference to the “secret process,” that Edgworth reported that the average wash recipe in Jamaica had “improved.”

The presence of Barbadian distillers also made them more competitive. Under ideal conditions the alcohol content of a fermenting wash could reach 40% before the yeast died and fermentation ceased. A long fermentation in a leaky fermentation was desirable because it allowed the complete conversion of sugars into alcohol. However, distillers in Jamaica appear to have been competitive. According to May (1746:40): “Many young distillers [in Jamaica] are always at a desperate hurry to see their fermentation cease, and think that their wash must ferment fast enough. I am constrained to say that there are also old distillers who pretend of the slowest society.” In contrast, Edgworth contrasted distillers in Barbados,

where there is great Moderation before you discover the Liquor is ferment, which is well, unless possibly four Hours, unless you witness much what it may get, say you put the ferment to distill the Liquor especially and as let it lay close covered, it must ferment four Hours after it has fallen, before you distill it for there is a fermentation lossed, after it disappears upon the cooling.

(Edgworth 1795:26)

In Jamaica, Edwards (1775 to 1784) received 140 gallons of proof rum from 1,200 gallons of wash. Thus, the alcohol content of Edwards’ wash only reached about 4.6% (a

colours. Balgove (1794:32) noted that about 190 gallons of good rum from 1,200 gallons of molasses indicating that the alcohol content of the wash had reached about 8.7% (Quick fermentation also resulted in the production of "a substance"<sup>1</sup> a distiller that still possessed a great deal of unused volatile but had the potential to cause later distillation (Wray 1941: 201-204). The potency reported by Balgove contrasts sharply with the apparent incapacity of Jamaican distillers. Thus, in the same way that Jamaican sugar planters affected their sugar to leave their plantations heavy in molasses, they were also inept rum makers who settled for a complete fermentation and lower rum yields.

Barbadian rum distillers may have also had a positive effect on the level of Barbadian rum-making. The minerals calcium and magnesium help catalyze enzymes in a wash composed, which facilitates fermentation. For this reason, "today some of the best breweries are located over wells that flow through lime and dolomite deposits (Katz and Freytag 1990: 12-14). A young Phoenician agricultural literature says, such as calcium and magnesium, covers the island of Barbados. In contrast, Jamaica is an island where, according largely of granite deposits and sandstones, especially in the higher elevations (Watts 1997: 8-12). Thus, Barbados is distillers, who used calcium and magnesium-rich soil water to combine their wash components, would have had a better chance of converting sugar to rum into alcohol during the fermentation process than distillers in Jamaica, especially in the limestone-poor areas at the higher elevations.

There is additional evidence indicating that a largely lower efficiency of Jamaican rum makers. Jamaican sugar planters may have had a greater propensity to discard waste. McCuller estimated that Jamaican rum makers used a 12:1 ratio of waste to gallons. This ratio resulted in the wastage of 40% of the available waste, which could have been used to produce another 1,775 gallons of rum or 4 gallons of rum per cwt. of sugar. McCuller argued that Jamaican sugar planters used the waste to feed plantation livestock. In contrast, one (Lowland Island) sugar planter (anonymous 1730: 244) wrote: "No Scraps are ever given to Stock in Barbados." Barbadian planters were distillers and



used almost every ounce of molasses and rum in rum-making. They also had fewer cattle in feed. If McCusker is correct, then the Jamaican propensity to allocate substantial amounts of molasses towards further reduced rum yields.

### **Rum Quality**

In the seventeenth-century, many white East encountered rum were shocked, especially those used to relatively weak fermented rye, beer, cider, and etc. In 1659–1664, Giles Silverwater (listed as Barker 1625–64), the brother of a Barbadian sugar planter, described rum as a “hot bellic and terrible liquor.” Richard Ligon and other Barbadian colonists subsequently referred to this concentrated spirit as “hill drink.” And French missionary Jean Baptiste Pissalieu (1704–1722) thought it “very strong and very rude.”<sup>10</sup> Consumers placed rum within the only alcoholic language known to them at the time and linked with toxicity. Both toxicity and rum were by-products of enslaved colonialism: war and rape. Yet, while war was linked to death and fatality in Classical antiquity and Christian/European thought, rum was made from the drugs of sugar making and the constant threat of disease, violence, and war. Rum did, however, possess the qualities of the modern age. It embodied the spirit of proto-industrialism: long distance trade and mercantile capitalism and was, therefore, an appropriate symbol for eighteenth-century colonialism in the Atlantic world. In addition, the growing Frenchness with-classified rum in the seventeenth-century made the “hot” quality of rum less surprising.

McCusker suggested that the discrepancy between rum yields in Barbados and Jamaica skewed the contrasting “quality” of Barbadian and Jamaican rum. Focusing on the period 1748–1772, McCusker constructed a colony-by-colony comparison in which Jamaican rum ranked highest in quality while rum from Barbados ranked at the bottom. According to McCusker (1989–904), Barbadian rum was the “worst” produced in the British Caribbean. However, this argument seems to contradict what we know about the Barbadian and Jamaican sugar industries in the late eighteenth century. Barbadians were most active sugar makers and rum distillers who formed their last “intoxivantly”-clayed taste of their sugar

and divided the additional molasses into rum. Jamaica, on the other hand, were “careless” sugar makers and rum distillers who produced low molasses-rum that left the distillate heavy or molasses. Why would the best sugar makers produce the worst rum and the worst sugar makers produce the best rum?

McCooker defined quality largely on the basis of alcohol concentration and the amount of molasses used to produce rum. Thus, strong rum made from a weak molasses (a high proportion of molasses) was better than weak rum made from a weak molasses (a low proportion of molasses). McCooker based his ranking on wholesale company evidence and the testimony of William Knowles, a cooper and trader in the Caribbean trade, who in a 1778 report to a Parliamentary Committee of Extraordinary Services, evoked the different British-Caribbean rum. While Thomas<sup>17</sup> was a factor at Knowles’ ranking, the report also stressed higher alcohol content of Jamaican rum (McCooker 1989:201-254 1979). Although the issue of percent beta-*n* listed to content, alcohol concentration as a measure of quality can be examined.

Table 11.1. William Knowles’ rum ranking and price scale 1778

Category	Average price per gallon of spirits
Jamaica	2 250
Antigua	2 875
Grenada	2 900
Montserrat	2 340
St. Christopher	1 560
Tobago	1 875
Demerara	1 875
Barbados	1 875
St. Vincent	1 825

Source: McCooker (1989:187)

According to McCooker, the deficient quality of Jamaican and Barbadian rum reflected deficient levels of alcohol concentration:

In England the distiller commonly intended all his low rum to produce a satisfactory spirit. Low rum was not considered a possible spirit object. Only the second distillation produced a “spirit” in the technical sense, but the distiller good enough with two distillations of his molasses did run farther “mature” his molasses to the rum-making process. In Antigua rum was the good for sale value of a second distillation. The general practice in the Western Hemisphere considered the low rum a satisfactory one. How rum was a spirit of the first extraction.”

(McCooker 1989:183)

According to McCusker, Jamaica, and other 17th-Century were the only “real champagne[s]” to this date because they “regularly distill no double-distill’d brand wine too high alcohol content.”

Understanding the construction of alcohol as a spirit, however, is more complex than simply knowing the method of manufacturing. In the British Caribbean, a *proof* spirit consisted of equal parts alcohol and water. Thus, a 100 gallon purchase containing 50 gallons of absolute alcohol and 50 gallons of water was a *proof* (100 proof) spirit, while a 100-gallon purchase containing 40-gallon absolute alcohol and 60 gallons of water was said to be 80 proof. A single-distillation produces a weak spirit called a *low wine*. According to McCusker (1997: 82–143), who cited the opinion of an anonymous mid-eighteenth-century sugar planter (anonymous 1782, 37), *low wine* was a *proof* spirit of equal parts water/alcohol. Yet, this definition does not fit with other eighteenth-century sources, including Edwards, so that the primary source McCusker used to explain Jamaica rum making. According to Edwards, his 1,200-gallon wash produced 500 gallons of *low wine*. Of that, 30 gallons was returned to the dist stiller for use in the following week and the remaining 470 gallons of *low wine* was re-distilled to produce 230 gallons of “*proof*” rum. Based on Edwards’ observations, therefore, the 500 gallons of *low wine* contained only about 71 % alcohol making it a spirit of 42 proof. Even if by the term “*proof*” Edwards was denoting the higher concentrated 100 proof (Jamaican *proof*) rum, which became standard in the nineteenth century, the *low wine* would still only have contained about 17% alcohol and be a spirit of 34 proof. Thus, Jamaica *low wine* was not a *proof* spirit and McCusker’s definition needs great refinement.

Barbadian and Jamaican distillers adopted different methods of re-distilling. In 1790, Antiguan sugar planter Samuel Martin outlined the different techniques in

Barbados and Jamaica and their effect on alcohol content. Apparently, that is the debate in which McCutcheon entered:

Whether the best method of distilling low wines is by returning them into the subsequent still of liquor, or by drawing them off separately, requires much discussion. The first method will certainly produce a weaker spirit, more palatable and wholesome; but the latter seems more profitable for the London market, because the larger disappearance of alloy spirit which will have more adulteration and colour in it, than the spirit is a spirit of distilled, the more pure it will be. This is evidently the general preference barbaque runs in all other, not only because it is of a much higher proof, but also more light, and capable therefore of more adulteration; but it may be doubted whether the barbaque plants that will have more by double distillation and over proof than by going by the proof in London. If that be a case, the experiment will, soon determine it will be for the profit to draw more proof runs from the weak, and a less quantity of low wines, as except distillers do in Barbados, but more commonly the spirit drawn from the weak is more cool, palatable, and wholesome, than that extracted from low wines by double distillation.

(Jamaica 1762/63)

To judge from Marten's observations, Jamaican distillers distilled a wash and the resulting low wines were distilled separately to produce a "first" spirit with a high alcohol content. Edwards described this process and noted that two wash-componants produced a 300-proof batch of low wines, which was re-distilled separately. In contrast, Barbadian distillers ran off a single wash and the resulting low wines was returned to the following wash-composition. The water batch was then re-distilled to produce a "weak" proof spirit.

However, the term "double distillation" is somewhat misleading in this respect of distillation method as alcohol concentration is not exactly double. Most Irish, Jamaican and Barbadian distillers did some amount of fermented wash material, yet produced different concentrations of run. Why should Barbadians run be less concentrated? Alcohol has a lower boiling point than water and distillation merely removes the alcohol from the wash. As a result, the first runnings as flow from the still were contained more alcohol. Thus, simply cutting off the flow of liquid thereafter will before the weaker spirit reached the purchaser could ruin the proof of the final product. For example, Bouquoy (1823: 205-206) wrote that once the runnings of low wine from the still fell below 67% alcohol, the remainder of the spirit, which comes from the still waste, should be thrown up into the

subsequent low water half" for re-dredging. Thus, drafters who paid close attention to the shoals following levees for weirs could regulate the shoal concentration of their own regardless of whether the low water was dredged separately, as was the case in *Antares*, or returned to the subsequent work, as was done in *Barbados*. However, because the low water half started out with a higher shoal content, it may have been easier and more expedient to regulate the strength of the spoil using the *Antares* method.

Notes indicated drafters produced work, even, that the evidence for such generalizations about shoal-content was weak for the late eighteenth century and certainly do not reflect early man-making in *Barbados*. As early as the 1660s *Barbados* drafters "should draft" their own to make high spoil spurs. Legon clearly described the practice of separately dredging the low water to reach a high shoal-content that the resulting run would create them. Indeed, *Barbados* drafters were so concerned with the strength of their run that the *Barbados* Assembly passed an Act in 1670 that *Barbadians* (1688) for producing run that would not reach the *Quadrangle* (1670-1687). This probably refers to the old practice of gauging the strength of spurs by turning them with propeller *Quadrangle* stopped in a spur that contained more than 50% shoal, will again (*Barbados* (1688) (1716, 1717). In the 1710s, an anonymous author (1717) 242 from St. Kitts noted that some *Barbadians* produce run "also digress upon the point" in 34.15 shoal content. In the mid-eighteenth century, the mill house at *Deer Hall* plantation *Barbados*, was apparently set up for the separate dredging of low water (*Belgrave* (1701 21-22) wrote "The Dredging House should have three Sails or masts 900 Gallons of Lignum" and a French bag enough to contain the low Water produced from the other three." The presence of a specific mill for taking low water suggests that drafters at *Deer Hall* re-dredged low water separately rather than returning it to the following work as described by *Marin*. In short, some drafters in *Barbados*, particularly in the early years of

the Caribbean rum industry, did “double distill” their low, weak and profitably highly concentrated rum.

In 1793, Johnston described the production of highly concentrated rum in Jamaica, but the practice was not universal in the late eighteenth century. For example, in 1794, Long (1744: 357) wrote “Some [Jamaican] planters draw the rum very low long, from a mixture first of making the most they can, and then perhaps degenerate the whole of their distillation.” Allowing the rum to go on too long produced rum water to enter the batch and weaken the rum. It also allowed insects (and other and other organisms known as *congers*) to enter the batch of rum, which sometimes resulted in first strength rum known as “old burnt rum” (Long 1774, 1: 357). However, Long asserted that Jamaicans were increasingly producing concentrated rum. Edwards’ account of double distilling in Jamaica (1819: 8-10) discussed the production of “old proof rum,” rum consisting of more than 50% absolute alcohol in which all will distil. The rum obtained through this method weighed 7 lbs. (3.18 per gallon, or 2.65 decms. evaporate) per cubic inch making it slightly more than 50% absolute alcohol. Moreover, Edwards (1819: 11-13) stated “In the process of rum with many planters, so little is proof of rum, that getting an strength of spirit what is lost in quantity” indicating that, although concentrated rum-making was still a relatively recent trend in Jamaica, it was becoming more common. The large scale still based concentrated rum making in Jamaica continued as late as nineteenth century. In 1832, Bouquoy (1402: 261-394) stated that the production of concentrated Jamaican rum above 60% absolute alcohol or 122 proof in the 1840s, Wray (1848: 336, 368-69) observed that the standard Jamaican rum contained 50-60% absolute alcohol or 110-130 proof. By the end of the nineteenth century, Jamaican rum was generally expected at 70% absolute alcohol (Perrault 1900: 109).

Davidson Martin and Kennedy observations, McCusker (1889: 188) wrote “Rum tradition is stated to pass by their island of origin, no doubt reflecting variations in the method of preparation which affected in part nature, then proof.” McCusker concluded

a systematic survey of price differentials, which largely supported his case. James E. Thorold Rogers' *History of prices in England*, English export duties, wholesale price records in the colonies, Kewley's report to Parliament, and the sworn statements of reporting merchants formed the bulk of McCusker's evidence. Prior data were incomplete for the seventeenth and eighteenth centuries, but good comparisons between Barbadian and Jamaican prices were available for some periods, especially 1619–1718.

In Table 1-8, *rum sold "before the coast"* included the original cost of the rum, freight, and insurance. *Rum sold "landed"* is the wholesale London market price of rum including the cost of import duties covered by the merchant. Both prices in Table 2-1 are shown in shillings per gallon. The price differences reveal that Jamaican rum was generally more expensive than Barbadian Barbados on the London market. However, this was not always the case. In the last twenty-five years (all before 1714) Barbadian rum was equal in price to, or more expensive than, Jamaican rum. In fact, the overall average difference in this period between the two rums is only 4 pence per gallon for rum sold "before the coast" and 4-1/2 pence per gallon for rum sold "landed." For the period 1768–1772, McCusker (1981:403–404) relied on Kewley's 1774 assessment of London market prices (see Table 2-8) and concluded that the average price of Jamaican rum on the London market was 3-25d shillings and Barbadian rum was 3-10d shillings, a difference of 1-1/2d per gallon. The price differential was less extreme in the Colonial colonies, where, although Jamaican rum brought a higher price, the difference between Jamaican and Barbadian rum was only 3-1/2 pence (McCusker 1981:403–404).

In the period 1768–1772, Barbadian rum sold for substantially less than Jamaican rum on the London market. Yet, Barbadian rum should have cost more. Due to a conflict with Charles III in 1763, Barbados paid an additional 4.5% tax on all exported goods (Dean 1972:263–266). Barbados was also further from London and should have paid higher freight and insurance charges. Yet, despite these added costs, Barbadian rum still sold for less on the London market when it was less desirable. As Kewley and Kewley

indicated, the increased strength of Japanese yen made it most popular and McCarter's analysis of price records seems to confirm it.

Table 5.9 Apparent Importation and Japanese non-price differentials per gallon in London

Year	Ethiopian runs		Japanese runs	
	Before the war	After the war	Before the war	After the war
1948	3.00	5.13	3.80	5.12
1949	3.08	5.05	3.74	4.87
1950	3.35	4.60	3.50	4.54
1951	3.45	4.97	3.43	5.07
1952	3.77	4.66	3.31	5.26
1953	3.35	4.41	2.70	4.59
1954	3.50	4.67	3.08	4.39
1955	—	—	—	—
1956	3.81	5.43	3.80	4.87
1957	3.71	5.72	—	—
1958	3.88	5.37	3.80	5.27
1959	3.19	5.15	3.93	5.17
1960	3.48	5.65	2.96	5.22
1961	3.60	5.67	3.01	4.88
1962	—	—	—	—
1963	3.46	5.62	2.90	4.67
1964	3.61	5.86	2.82	4.69
1965	3.46	5.62	2.31	4.32
1966	3.18	5.39	2.42	4.87
1967	3.09	5.15	2.35	4.37
1968	3.79	5.82	2.88	5.13
1969	3.14	5.24	2.99	5.26
1970	3.01	5.08	2.31	4.44
1971	3.79	5.71	1.78	4.81
1972	3.79	5.77	2.48	4.65
1973	3.17	5.07	1.77	3.76
1974	3.35	5.28	2.00	4.87
Average	3.12	5.71	2.65	4.84

Source: McCarter (1971: 171)

However, convenience does not necessarily correlate with quality. In fact, Martin (1981: 62) believed Ethiopian diesel fuel produced "second quality, most palatable and wholesome" than the "first quality" petroleum Japanese. According to Martin, the higher price of Japanese runs simply reflected its higher alcohol content and thus "greater potential for adulteration, yet, in terms of quality" Martin argued, "it may be doubted whether the Japanese product does not have more potentiality to taste and quality (by double distillation and/or good fuel test given by the price in London)". In addition, the evidence is consistent with what we know about the intensive Ethiopian and Japanese Japanese.



single molecules. In Barbados, low water was correlated with the subsequent crash, rather than as a separate definition, and, therefore, absorbed more importance (consequence) from the preceding crash, which makes sense as a descriptive statistical technique. The Barbadian method of distillation required careful attention, because the presence of too many impurities sometimes led to the production of "bad" rum. On the other hand, the separate double distillation method used in Jamaica merely concentrated the alcohol and did not contribute anything more to the taste and flavor of the rum. The practice of using good alcohol for the process to increase the amount of alcohol shipped without increasing shipping costs, a purchase of 620-130 proof rum contained 10-15% more alcohol than a purchase of good rum but the shipping cost and space used were the same. The evidence does not show a contributing whereby "careless" Jamaicans to get rum was becoming careful rum distillers. Quality, not quality, as Hatten described, was "evidently the ground of producing Jamaican rum." The Barbados distilling method performed, according to Hatten by "superdistillers" produced more alcohol or rum.

McCutcheon endorsed Kewley's making of rum quality and argued that the higher alcohol content of Jamaican rum made it a better spirit. However, McCutcheon also derived results of rum making for each Caribbean colony, which sought to confirm Kewley's argument. The model was based on the amount of molasses used in the production of rum (Table 5-10). Previous distillers, according to McCutcheon, used 100 gallons of molasses to produce only 54 gallons of rum, while, in Barbados, 100 gallons of molasses produced 145 gallons of rum. McCutcheon argued that the greater proportion of molasses used in Jamaican rum making meant that Jamaicans produced higher quality rum.

In the French Caribbean, distillers made distinctions about rum quality based on the ingredients used in rum making. For example, sugar planter Joseph-François Clauprelier de Cottey (1761-?) differentiated between *good* rum, drawn from the distillation of pure sugarcane juice (versus molasses) and *bad* rum drawn from waste and molasses. *Caribe ou ananasso*, called *claret*, was apparently the preferred beverage because pure cane juice was less likely

to introduce an earlier form (Thompson deCaussey 1971: 8). Distillation in Martinique relinquished the distinction between rum and agave in the nineteenth century, but distillation in Guadeloupe and Haiti maintained it until the early twentieth century (Ponsolt 1988: 2114-115). In the modern French Caribbean, rum/agave production was made from pure cane juice, while other industrialized nations rum made from molasses and waste.

Unlike their French-Caribbean counterparts, British-Caribbean distillers made no significant distinction between rum made from sugar cane juice and rum made from molasses and waste. Besides the British-Caribbean was often equivalent to what the eighteenth-century French-Caribbean rum makers called *agave*. While molasses may have been a preferred ingredient for its high sucrose content, British-Caribbean distillers had no problem using large amounts of waste to make their rum. The most important element of British-Caribbean rum-making was that the waste contained the proper amount of fermentable sucrose, whether sugar cane/straw waste or molasses, waste, or pure cane juice did not matter. In fact, in the beginning of the eighteenth century nearly all rum is produced from whatever the end they used locally on molasses. Pure cane juice from 'rum cane' was also occasionally set aside for rum making. In the British Caribbean, the quality of the rum produced was the same regardless of the source of sucrose.

Table 3. *Dr. McCarter's report of molasses to rum conversion (1766-1772)*

Column	Molasses (lb)	Amount wine per gallon of distillate
Jamaica	100-125	3-250
Grenada	100-125	2-300
St. Kitts	100-125	1-950
Antigua	100-125	2-815
Montserrat	100-125	2-380
Dominica	100-125	1-815
Nevis	100-125	1-815
Barbados	100-125	1-815

Source: McCarter 1989:126-128

Gregg Edwards' *Agave for Internationalism*, McCarter argued that 12,000 gallons of molasses produced 11,300 gallons of rum from rates of 94 gallons of rum per 100 gallons of molasses. In Barbados, McCarter found correspondences about rum quality on Belgium's contributions for Data (1840) study. Belgium reported that 27,500 gallons of

molasses and 62,000 gallons of rum produced 40,000 gallons of rum. Using Bridgman's estimates, McCook argued that the average Barbados planter used 100 gallons of molasses to produce 145 gallons of rum – or a 100:145 molasses-to-rum ratio. According to McCook, the lower molasses-to-rum ratio adopted in Barbados rum as law places in British Caribbean non-comparability. The rest of the British Caribbean fell some where between the high Jamaica ratio of 100:144 and the low Barbados ratio of 100:145. It appears that McCook set out to substantiate Knowlton's (1733) finding and did so using the accepted molasses-to-rum method for quality. That, McCook could not reproduce Knowlton's average price ratio of rum quality with the level of molasses used in rum making. For example, rum makers in Canada and St. Kitts used more heavily on molasses than rum makers in Antigua—even though Knowlton's price differentials ranked them as the worst seller. Rum makers in Newfoundland used more molasses than rum makers in Barbados, yet Newfound used a lower average price. Rum makers in St. Kitts used more molasses than rum makers in Montserrat, yet rum from Montserrat was more valuable. In addition, rum from St Kitts brought a higher average price than rum from Grenada even though rum makers in Grenada "regularly double distilled" their rum.

McCook's model of rum quality gave little valuable contribution when made to the question of fermentable sucrose in the wash. In Jamaica, McCook's model ignored 20,000 gallons of rum, which, at the 6:1 ratio that Edwards' estimated, was equal to another 4,000 gallons of molasses. In Barbados, McCook ignored 62,000 gallons of rum, which, at the 6:1 ratio established by Bridgman (1733:26), accounted for another 12,000 gallons of molasses. Putting the concept of quality to rest, rather than molasses, accounts for the fermentable sucrose in the wash and would have been a more appropriate model for establishing rum quality. In the case of Jamaica, 100 gallons of rum is produced 40 gallons of proof rum using Edwards' original figures. In Barbados 100 gallons of rum is produced 100 gallons of proof rum, significantly increasing the gap with Jamaica. Further, if we accepted given a statement that sometimes only 8 gallons of

were reported was pollen of unknown, that the gap between Barbados and Jamaica decreases even further. In such a case, 100 gallons of juice were produced 70 gallons of Barbados run, nearly the same as the 120 barrels of Jamaica.

Yet, if we were to accept that the level of sucrose determines the quality of run, then Jamaica run, according to the evidence from Edwards and Belgrove, was still of higher "quality." Or was it? Studying the evidence is correct, although more appropriate, will underestimate the amount of fermentable sucrose used in run making while complete accuracy because the concept of sucrose is still only an approximation of the level of sucrose. Windermere producers have devoted a great deal of attention to producing and maintaining the level of sucrose in sugar cane juice. Issues at the Windermere sugar industry in Barb. In order to determine how modern sugar processors may weigh such pollen of juice as a crop and then subtract the total amount of sugar produced. Some sugar planters in the eighteenth century's sugar in Java experimented with such methods, but there are no records for an enterprise (anonymous 1737: 262; Edwards 1788-90: 90). A variety of factors influence the level of cane juice and molasses, including soil quality and the method of purging sugar. Even modern sugar industries using high-tech machinery produce a wide range of sucrose levels in molasses. For example, a study of seventeen South African sugar factories in 1937 found that levels of sucrose in molasses ranged from 31.2 to 43.1% and levels of molasses sugar, also fermentable sugar, ranged from 4.4 to 22% (James 1964: 271). Clearly there were molasses in fermentable sucrose/levels on plantations in Jamaica and Barbados. If no variation existed, then the 6:1 ratio of sucrose to molasses in Jamaica would exist in Barbados and on every sugar plantation in the Caribbean.

Barbados developed a sophisticated cane industry in the early days of settlement. By the 1640s the island's colonists made highly concentrated run and exported it throughout the Americas. Barbadian officials were paid laws encouraging the production of high quality, high proof run. The competitive market place then favored the growth of an efficient Barbadian system that sought to maximize run production. They played much of

their sugar and used the available molasses and rum for the soil house. They experimented with new soil mixtures and constructed high yielding soil components. Their peasant run, molasses producers produced rum and molasses with high levels of sucrose. In contrast, Jamaican sugar planters, spoiled by abundant lands, viewed much of the necessary expenditure of rum manufacturing. Most important, they allowed their sugar to leave the colony fairly in molasses. They increased the alcohol content of their rum in order to reduce shipping costs, but produced a less distinctive spirit.

American about the poor quality of Barbadian product should be carefully examined. Barbados maintained a significant amount of trade with North America but Jamaica produced large amounts of sugar and rum for the lucrative metropolitan market. While the richest Barbadian planters class improved production methods, whereas Jamaican planters in London were in a significantly better position to promote their goods to Parliament and market their produce in the British consumer. The Jamaican presence in Britain very soon helped elevate Jamaica from its inferior status and demonstrate that Barbados as the "worse." One of the earliest examples of Barbados' struggle with colonial competition occurred in the 1660s when tobacco from Barbados was noted for its inferior quality (Dunn 1973:49-51). Virginia Company interests clearly had a stronghold on the London tobacco market and probably promoted the superior image and poor reputation of Barbadian tobacco. In the eighteenth century, Jamaican interests may have likewise attempted to ruin Barbados sugar and rum. To protect their reputation, Barbadians rapidly dried their sugar and produced a high quality product rather than compete with the massive Jamaican output. They also produced excessive amounts of rum and turned to the large regional markets.

McCallister's characterization of Barbados rum as the worst in the Caribbean may reflect the pattern of the Barbadian rum trade and the inferiority of his rum source. Britain was never a major destination for Barbadian rum. In 1776, the year of Kenneth's ceremony, less than 6,000 gallons of Barbados rum entered Britain (Rogers 1987: 17).

Within little time of entering the British market, it is unlikely that Keweenaw ever encountered Barbadian rum. Keweenaw obviously did not have much ground to work with when it came time to evaluate Barbadian rum. In contrast, Jamaica adopted nearly 2 million gallons of rum in the nineteenth year. Moreover, Keweenaw's unfavorable account of Barbadian rum quality was written during the decline of Barbadian rum making. The outbreak of the American Revolution destroyed Barbadian rum making for centuries. By the mid 1770s Barbadian rum making grew on the decline. In addition, despite evidence showing that rum quality is not determined by the amount of molasses used, in fact, if a more often New Englandism, which relied solely imported Caribbean molasses, would have been the high-quality and most widely accepted the metropolitan market, it was not (Blanton 1997: 78). From records created by recorded with molasses use in the British Caribbean, rum was the key ingredient in rum making and, in the British market, rum's economic context, rather than its quality, determined success.

### Conclusion

In the eighteenth century, rum became a valuable commercial product, which led to a sharp increase in the number of rum-producing rum-making. Rum-making remained a sophisticated art greatly dependent upon the skill of the distiller. Planters experimented over time to increase rum yields and experimented with different mix of components in order to master the complexities of rum-making. They adjusted the proportion of ingredients in the wash, developed new and more complex wash components, increased the size of their stills, and refined rum-making equipment. Yet, a closer examination of rum yields shows that numerous environmental and technological constraints prohibit the construction of good competitive models of rum production. Jamaica and Barbados emerged as the two leading rum makers in the Caribbean, but they adopted distinctive approaches to rum making and tailored to different markets.

In the eighteenth century, rum production, distillation, storage, and distribution flows also shaped the rum-making practices of planters, plantation managers, and merchants. Rum-making was

strategies in the British Caribbean – as distinct reflecting the encouragement of British mercantilist policies. However, by the end of the eighteenth century, French Caribbean planters were also exploring new rum-making techniques and attempting to compete with British Caribbean rum markets, as British policies began to open new markets for French Caribbean rum. An examination of these dynamics forms as the following chapter complements our macro-level interpretations of rum policies and scholars' our understanding of Caribbean rum making.

## CHAPTER 6 CONTAINING A VOLATILE SPIRIT: RUM IN THE EIGHTEENTH CENTURY

At the beginning of the eighteenth century, Caribbean rum began to flow across the Atlantic and through the institutional grape brand alcohol industries of southern Europe. Wine and brandy markets in Spain and France quickly noticed Caribbean rum in a commercial bottle. In the Spanish-Caribbean, colonial officials rather of manufacturing and better Spanish Caribbean rum made is underground. French Caribbean rum makes found somewhat better. Although France prohibited rum from entering metropolitan ports, French Caribbean rum-makers continued their work through various patterns of supplying European markets at the margins of the Atlantic world. The Seven Years War was a turning point for Spanish and French-Caribbean rum. Labor made reforms followed the conflict and weakened institutions against rum. The American and French Revolutions also weakened Spanish and French-Caribbean rum making, but the threat of home markets continued to intensify pressure. As the opposition out of the opposition, British Caribbean rum making flourished. British officials were seen as a potential ally in their own battle against foreign alcohol, especially wine and brandy from southern Europe. They actively encouraged British Caribbean rum imports and as a result, Jamaica emerged as the leading rum producer.

### *Academic's Code*

In the nineteenth century, Spanish colonies in Hispaniola and New Spain produced grapes in fermented alcohol beverages made from sugar cane juice, and, by the mid-nineteenth century, colonies were distilling rum from sugar cane, growing regions of the Spanish-Caribbean. Spanish colonial officials expressed concerns about the cost of local rum making. Rum was often in national export revenues from Spanish wine and brandy and



many perceived excessive wine consumption, especially by African slaves and Indians, as the cause of social disorder. Throughout the seventeenth century, Spanish colonial officials monitored local ordinances that sought to curb the production and sale of wine. The Real Cédula of June 6, 1693, prohibited wine making in all the Spanish colonies. However, the constant reiteration of the prohibition suggests that officials were unable to control illicit distilling. Peter Clavin (1988: 41–43), Henry de Tovar (1994), Jonathan (1951: 142), Taylor (1971), Jeremy-Coleman (2001), *Archivo General de la Nación, Caxamal, Venezuela records* (Baker-O'Leary, personal note, volume 15, real cédula number 27, folios 168–177v.),

In the eighteenth century, Spanish Caribbean wine makers continued to face resistance. The War of Spanish Succession (1701–1714) forced Spain to tighten economic control over her colonies, which included tight enforcement of laws designed to curb Spanish colonial wine-making. In addition, the war interrupted the Spanish wine and brandy trade and, as a result, Spanish wine and brandy makers suggested measures against ship monopolies, including competitive licensing.

The Iberian peninsula had developed a robust wine industry in the early Christian era and, in the fifteenth century, wine production began in the Spanish Americas. Spanish wine and brandy were widely consumed in the peninsula. Huge amounts were also exported to northern Europe. For example, in the 1600s, nearly two-thirds of all wine shipped from the Spanish Americas went through London (Ussery 1991:246). Trade records, manifests, accounts, and the ubiquity of Spanish olive-jars frequently used for the transport of wine and brandy, recovered from Spanish-colonial archaeological sites attest to the fact that Spanish wine and brandy also found substantial markets in the Spanish American colonies (Garry 1994; Duggan 1972–1981; Fariña 1976; Duggan 1982). Spanish wine and brandy were also widely consumed in the foreign Americas. For example, among the numerous alcoholic beverages served at a banquet party held by Barbados sugar planter Colonel James Orono in the late 1640s were “claret, Canary, Red Wine, and wine of Pele [Pele, Aricaia]” (Ligon 1637: 28). In addition, Spanish wine and

heavily facilitated trade between the Spanish and Dutch Indians in the Lower Andes, Tama Indians in Hispaniola, and Native Americans in Florida and Brazil and Central America (Kroeber 1972, 1983; Singer 1625 cited in Holmes and Wickenham 1992: 94; Low-Costs 1976: 116).

The War of Spanish Succession severely damaged the Spanish wine and brandy trade. British imports of Canary wine dropped from 2,055 tons in 1700 to only 75 tons the following year. Also, British imports of “Spanish” wine dropped from 3,738 tons to only 468 tons in the same period (Schumpeter 1964: 32). The war provoked Spanish officials and weakened Spanish wine relations American colonies. After the conflict, Spain tightened controls over her colonies, including banning of Spanish-American wine-making. The Royal Cédula of August 16, 1714 *recomendó la Real Cédula of June 8, 1683* which prohibited wine making throughout the Spanish Americas. The Crown ordered that all production materials be confiscated and broken. The owners were paid 100 pesos for the first offense, 200 pesos for the second, and 300 pesos confiscated for the third. The same penalties applied to those who made the wineowners for making alcohol. One-third of the money collected from the fines and confiscations went to judges and two-thirds went to the royal coffers of the *Consejo de Indias* in Spain (Llanusa Ceballos *para comen. Archivo General de la Simba, Caracas*. Venezuela records Real Cédula *para que para realen* 10, vol. 444 file number 31, folios 162-177v.). The law exemplified increasingly a thinking of eighteenth-century Spain and was evidently aimed at increasing exports of winegrapes and wine and brandy to the Spanish-American colonies.

After the war, Spanish wine and brandy exports recovered. In the eighteenth century, Real Cédula alone reported over 1.1 million gallons of Spanish wine and over 10 million gallons of Canary (Schumpeter 1964: 32, 36). Prohibiting the valuable national industry meant that the prohibition against *aguardiente de uva* remained strong. However, the demand for Spanish wine and brandy in the Spanish-American outweighed supply and, as a result, wine and brandy making expanded in Porto-Avery (1968). Real

1986, 1997; Ruiz and Singh 1989). In the nineteenth and twentieth centuries, Peruvian *chocolate* (precisely) helped sustain the domestic sugar and honey in distant and marginal areas of the Spanish American world. The small-scale production of domestic sugary-based pulque, agave-based syrup, and grain-based starch have also thrived in the outlying regions of these Spanish possessions (Jaraman 2000, Jaraman 2006; Taylor 1979: 30, 33).

While Spanish and Portuguese were not heavily helped meet some of the colonial alcohol needs, especially those of the elite who preferred not to offend them, the illicit production of *aguardiente de caña* filled the void. Although they were perhaps difficult to control, small-scale illicit distilling operations have been a constant feature of many colonial societies. There are numerous instances, especially in colonial Africa, where the illicit production of alcohol threatened despite prohibitions from colonial administrators (Adams 1997: 95–114, Anshel 1984: 165–173, Coker 1989: 99–105). Illicit distilling operations required assistance from the local economy – who benefited by receiving cheap agave and chocolate economic opportunities. Such distilleries often have constituted local folk know- and even an able hands challenging repressive colonial authorities.

In the eighteenth century, Spanish colonial officials prohibited work by coastal illicit rum making. They were forced to tolerate rum making prohibitions and impose further measures to enforce compliance. In Cuba, a decree of 1739 gave distillers 12 days to close operations or face fines and the destruction of their property (Chen Chen 1988: 40–43). When distilling continued and in 1754 Cuban officials ordered the destruction of stills and the imprisonment of illicit distillers, those caught distilling were forced to work on the public plantations without salary until they had become beggars (Chen Chen 1988: 43).

Illicit distilling was also common in New Spain. According to colonial historian William Taylor (1999: 30), rum was produced in “small illegal stills wherever sugar cane grew.” As in Cuba, colonial officials imposed prohibitions on rum making. In 1719, when

might destroy a good deer or kill half their population and received 200 Indian or six goats in gold (Humboldt 1807:65). Yet, sugar cane continued to be the basis for alcohol in parts of New Spain and, in 1788, Spanish colonial officials estimated that 80,000 barrels of a homemade sugar cane spirit alcohol called *chaguis* were annually consumed in the mining area around Mexico City (Taylor 1879:33). Distillate was making also illegal in and around Caracas, which received illegal shipments of rum from the nearby Dutch colony of Curaçao. Court documents from Caracas testify to the numerous individuals who failed to comply with the ban (Gonzalez-Cabán pre-1800s). Officials in Puerto Rico, New Granada, and Santa Domingo also struggled to control illicit rum making (Díaz Chaco 1980; Maza de Torres 1982).

An exception to the ban on rum making was made for the occasional production sale, and trade in rum for ceremonial purposes, especially for the treatment of Native Americans. For example, Cuban rum was used to treat illness among Native Indians in the nineteenth century colony of Florida (Díaz Chaco 1980:56). Cuban rum shared the trade with Florida Indians (Hoskins 1981; Maza de Torres 1982:135–136). Florida archaeologist Hale Smith and Mark Gumbert (1991) have recovered alcohol bottles from seventeenth-century Florida Indian sites, which confirm the widespread use of alcohol among Florida Indians. In the eighteenth century, alcohol abuse was common among the Calusa Indians of southern Florida and Spanish Jesuit missionaries there condemned the alcohol trade. In 1743, Calusa Indians resisted attempts to exclude alcohol from the fair trade and told Jesuit missionaries, “without the rum, they neither can live or wish to be Christians” (Maza de Torres 1982:136). Ethnohistorian studies conducted by archaeologist Charles Fairbanks (1971) later revealed widespread alcohol use among the Timucua Indians of Florida well into the nineteenth century.

Another exception to the prohibition against rum making existed in New Granada (Colombia and Ecuador). It was difficult for Spanish wine and brandy to reach outlying areas of the Spanish world and, as with rum and brandy making in Peru, rum

making rum (or to help fill the domestic need). Archaeologist Ross Jamieson (2008:183) recovered rummer vessels and larger storage jars from colonial sites in Curacao, Ecuador, which, according to Jamieson, may have been used for rum-making in the northeast sugar-growing region (Jamieson 2008:183). In 1734, colonial officials in New Granada won the right to sell rum via government-controlled stores. Despite their absolute moral authority, might accompany rum consumption, officials and traders probably saw rum as a way to integrate the large Indian population into the local market economy. There were, however, other economic benefits. In the first six years of the system, officials collected 15,400 pesos in tax from farmers for the sale and distribution of rum. Distilling operations were concentrated in the city of Bogotá, which paid more than half of the monopoly fees (Mora de Tovar 1988:32).

A rummer system in the mid-eighteenth century helped stimulate Spanish Caribbean rum-making. The Seven Years War (1756-1763) disrupted American trade and, in 1762, British forces captured Havana, Cuba. The year-long British occupation of Cuba temporarily opened new British and British colonial markets to Cuban rum products. The occupations have introduced large numbers of slaves. They may have also brought distilling equipment and knowledge of advanced rum-making methods. Following the occupation, Spain's Bourbon-reforms liberalized Spanish American trade. In 1764, open trade between British and Spanish Caribbean colonies increased the flow of French Caribbean rum, rum-making equipment, and knowledge of advanced rum-making techniques to the Spanish Caribbean (Tamarit 1988:329-331). The British Free Trade Act of 1766 opened free ports in Jamaica to foreign shipping, which probably increased trade (and rum) between Jamaica and Cuba (Perry, Hardlock, and Morgan 1987:142-144; Rogers 1958:126-128). One drawback to the Jamaican Freeport system was that Spanish and French brands were easily smuggled in to Jamaica "to the great prejudice of the rum market" (Rogers 1879:89). Spain also experimented with free trade zones (like the port of Havana at its northern limit, Domingo). The most open trade policies highlight Spain's growing concern about the

economic viability of the Spanish Caribbean colonies and new attempts to stimulate colonial growth and development.

In 1763, shortly after the British occupation, officials lifted the prohibition against rum making and the *vi-Cuba and Puerto-Rico* (Cuba Colon 1981-82: 126). The inability to monopolize rum trafficking probably hastened this decision. Opening the rum industry also meant increased competition for Caribbean rum makers. In the 1770s, Cuban rum was exported to West Spain, Cartagena, New Orleans, and Florida, where rum making was still prohibited (Sanjurjo 1976: 147). Again, Spanish colonial officials may have also seen the local markets as a way to bring the large market of indigenous drink requests into the local market economy. Cuban rum exports jumped from less than 50,000 gallons in 1776 to more than 100,000 gallons per year by the 1780s (Piquero 1976: 38-40). Spanish officials gradually increased restrictions on rum making in the Spanish colonial world and, in 1796, restrictions were lifted in New Spain (Montesachs-Palomo 1978; Taylor 1976: 55).

Despite the removal of legal restrictions, rum making in the Spanish Caribbean remained at the end of the eighteenth century a relatively well-cloped industry. Decades of prohibition had stifled Spanish colonial rum making and few had knowledge of advanced or commercial distilling techniques. In addition, prohibition against distilling equivalent *de rinde* ensured that wine and locally imported spirits like Canary Islands and Spain—as well as their native *Pera*, continued to be the preferred drink—especially among the elite. Local markets were also saturated with alternative alcoholic beverages, such as *cazabe* and *metate* in New Spain and *chicha* beer and grape wine in South America (Harrison 2000: 144-145; Morúa-de Tovar 1941; Katz 1946: 1987; Bates and Smith 1989; Schiebeler 2000; Taylor 1976: 57-58). However, the main factor inhibiting the growth of Spanish Caribbean rum making was the lack of a metropolitan market.

In the eighteenth century, the seventeenth-century Spanish American market as important destination for foreign Caribbean rum. French Caribbean markets earned substantial amounts of foreign rum in Spanish colonies. For example, between 1733 and

1752, Martinique exported an annual average of 1,457 barrels of rum to about 147,000 gallons to the Spanish mainland colonies (from 1800 to 1811) to 1786, Saint Domingue (44%), Martinique (44%), and Guadeloupe (4%) exported just over 100,000 gallons of rum as well as another 202 barrels (about 22,000) of higher quality rum to the same destinations (from 1711 to 1714, Mexico 1569; Turin 1647 229-231). French Caribbean rum also exported rum to other parts of the Spanish Americas, Santo Domingo. Nonetheless, the wealthy French colony of Saint Domingue, which heavily on the illegal smuggling of French Caribbean rum to St. L. S. interests in Saint Miley, i-Croix Laroque from Saint Domingue, produced a detailed account of Spanish Santo Domingo, but made no reference to rum production in the colony, which probably led to the conclusion...

The independence of these islands is again remarkable as they drink, which is generally water. They are fond enough of rum, but, as they have some means which is smuggled in there, this is not very scarce and their drinking is as if they French were a part.

(Morgan to Saint Miley 1791/92)

British Caribbean rum imports also benefited from the demand for rum in the Spanish colonies. Antonio planter Gabriel Laug (1774, 8-99) estimated that in the period 1768-1772, Havana shipped an annual average of about 120,000 gallons of rum to "South America and Foreign ports." According to Laug, most of this went to Spanish America in exchange for "sugar and formal costs."

The American and Mexican Revolutions greatly increased the Cuban rum industry. The foreign per capita Cuban rum exports increased after the American Revolution. Cuban rum exports jumped from less than 50,000 gallons in 1770 to an annual average of nearly 150,000 at the height of revolutions in 1781 and 1792 (Figueroa 1994: 43). In the 1790s, rum exports averaged about 115,000 gallons per year. According to Brazilian missionary and historian W.J. Goulart (1873: 124), British trade restrictions, which followed the American Revolution, forced U.S. ships to Cuba where they obtained rum for U.S. lumber and provisions. Cuban rum helped feed the great American drinking binge that followed the

Revolution. However, the United States did start to rise steadily in the 1770s. Cuban molasses and rum exports were nearly equal.

The second purpose Cuban rum exports served during the British Revolution. In the 1770s, the British Revolution disrupted the rum and molasses trade between French Caribbean in North and South America. Many French colonists fled to Cuba bringing with them slaves and sugar and rum-making equipment. In 1790, the year before the slave uprising, Cuba exported about 170,000 gallons of rum. By the first decade of the 1800s rum exports averaged about 900,000 gallons per year. Cuban rum exports peaked at the height of the conflict at 1800 reaching more than 1.5 million gallons, a level that would not be achieved again for another half century (Piquero 1978: 46-47). The peak in rum exports also coincided with the last year of the U.S. whiskey tax. Regulated rum exports probably also helped ease the alcoholic needs of the large numbers of European soldiers and sailors converging on the Caribbean at this time. Although rum making was increasing, Cuban molasses exports were still more important to the Cuban economy. In the first decade of the 1800s, Cuban molasses exports were one and a half times greater than rum exports. Saint Domingue was the largest exporter of molasses to the United States and after the British Revolution, Cuba emerged to fill the void.

### Tobacco

In the French Caribbean, rum-making emerged in the early years of settlement alongside sugar production. Rum was widely consumed in the French Caribbean and exported to markets in the leagues of the Atlantic world. By the eighteenth century, French rum and heavily-taxed wine became one of the principal exports and they persuaded French officials to take action. In 1713, France closed its ports, except those in Normandy, to French Caribbean rum. However, unlike the situation in the Spanish Caribbean, the restrictions did not prohibit French Caribbean rum making or foreign markets (underground).

French rum and heavily-taxed the alcoholic needs of the French people who utilized French alcohol with classical sophistication and satirical wit and profit. The French were made



especially with England, but from large areas the early Middle Ages and the trade was central to the French economy (Hansen 1906: 1906). However, in the nineteenth century France began to lose important markets as western Europe no longer needed wine from Spain and Portugal. Conflict between France and England in the late nineteenth century also disrupted French wine exports (Klein 1994: 251, 253–256).

The most significant driver in the French wine trade in Britain, however, may have been wine producers and merchants from Oporto and the Atlantic island of Madeira. The British Navigation Act of 1663 allowed Portuguese wine to be imported directly to the British American colonies without having to pass through English ports. The privileged position of Portuguese wine was expanded in 1703 when it was given favourable trade status by the British Empire in exchange for the right to sell English cloth in Portugal duty free (Hansard 1998: 1998: 1871–1871–1881). Wine from Portugal and Madeira was well liked in Britain. For example, during the eighteenth century Britain imported more than 200 million gallons of port, which included exports from Oporto, which represented Britain's largest wine export. Britain also imported in the same period almost another 15 million gallons of wine from Madeira (Schumpeter 1968: 82–85). Portuguese wine was especially popular among elites in the British American colonies. In Jamaica, in the 1780s magistrate Claude Landon (1740: 24) wrote: 'The common drink here is Madeira wine [which] is used by the better sort.' Landon (1740: 24) also believed it was particularly well suited to the hot Caribbean climate: 'Madeira wine which some were and agree perfectly well with and is convenient in this place.' In Barbados, Dr John Hughes (1750: 37) believed wine from Madeira could 'temperate the frequent agues' of those who had fallen ill to a variety of tropical diseases. In 1712, Barbados imported £30,000 worth of wine from Madeira, which represented nearly 9% of the value of its total imports (Rabrenson 1712: 8–11). Even French colonists held a favourable opinion of Madeira. French missionary Jean Baptiste Pilon Laferrière (1724, 1733–1736) mentioned the frequent use of Madeira in his

Pinheiro-Caribbean and noted that it was the most significant among *grape*, a *bulky* drink among Caribbean elites.

Pinheiro-wine and brandy imports could not defeat their Portuguese competitors, but they could narrow the threat of Pinheiro-Caribbean wine. They reported that problem, a corruption of the *Don de-Caribbean* *de* drink, had deleterious health consequences. In contrast, Pinheiro wine and brandy were linked to medicinal benefits (and, *vin de vin* [wines of light] also were given to Pinheiro brandy, strengthened that usage). In 1680 sugar refiners at Pinheiro-poll found the government for the right to *distill* *vin de vin de* *refiners* produced from the waste or *residue* of sugar refiners. They were unsuccessful suggesting that, by the late seventeenth century, the Pinheiro government already opposed the production of wine *grape*-based drinks. On January 31, 1713, Louis XIV's council agreed a royal decree that prohibited Pinheiro production of wine-grape-based alcoholic beverages, including alcoholic beverages made from *grapes* (grapes) and the waste of sugar refiners (Korngold, 1966:12-13). The decree also prohibited, except for the ports or *Manzanilla*, the import of Pinheiro-Caribbean wine. The decree also specifically argued that wine was *prejudicial* to health and threatened to compete with Pinheiro wine and brandy (Juss 1831:92).

Despite the setbacks of war throughout the eighteenth century, the Pinheiro wine and brandy trade, particularly in northern Europe, remained central to the Pinheiro economy. The British estimated within Pinheiro alcohol and imported more than 40 million gallons of brandy and 15 million gallons of Pinheiro wine (Schumpeter 1966:12). Pinheiro wine and brandy also had significant markets in Iceland, Africa, and the Pinheiro Caribbean (Blanton 1704, Robertson 1733 8-11, Skelton 1957). As a result, the 1713 law against Pinheiro-Caribbean wine imports remained in effect throughout most of the eighteenth century. Yet, despite the restrictions, Pinheiro-Caribbean wine trading was more successful than their Spanish-Caribbean counterparts. This law may have limited the growth of Pinheiro

Caribbean rum trading, but French-Caribbean nations continued to supply a large share of the Atlantic markets.

According to French-Caribbean historian D. Barthelemy (1996: 464), during the first half of the eighteenth century, Martinique produced about 280,000–300,000 gallons of rum annually and exported about half of its production. This estimate is probably accurate. For example, between 1740 and 1745 Martinique exported an annual average of 4,361 *barriques* of rum to French and foreign American colonies. Using Laboré (1784:302) estimate of 130 litres (33.7 gallons) per *barrique*, annual exports mean about 280,000 gallons (Juss. 1911: 94, Parnell 1900). However, by the mid- to late eighteenth century it was rather the French Caribbean *barrique* monopoly's equality to the British production (100–120 gallons). This larger *barrique* size is more appropriate for the mid-eighteenth century and it is used throughout the remainder of this discussion. Using the larger *barrique* size, annual rum exports from Martinique between 1740 and 1745 reached about 280,000 gallons. This shipment is fairly substantial rum export trade: the value of rum exports in 1740–1745 represented only about 2% of the value of sugar exported to France (Juss. 1911: 112–113).

In the late seventeenth and early eighteenth centuries, France implemented a Colbertist mercantilist policies. The various systems restricted French-Caribbean trade with foreign ports and sought to open the main type of positive trade relationship between the French-Caribbean and French North America that existed between the British Caribbean and the British continental colonies. As a result, French-North America became a main destination for French-Caribbean rum. Until 1763, rum was a chief item of trade in New France, where it fed the North American fur trade. In French-India in New-England, Saint Pierre and Miquelon, and Royal Island, rum was exchanged for codfish, which helped feed the growing Irish population of the French Caribbean (Gardet 1963: Gould 1979/1990/1996). French Canada also supplied much needed pharmaceutical supplies, as drinking water

tee, and livestock. The French colony of Louisiana also received its share of sugar (Crosby 1982). According to French colonial Minister Guy Juss (1831: 142-143), in 1769, Martinique shipped 3,674 barrels of sugar, about 300,000 pounds, to French colonies in North America (see also A.G. Tardieu 1988: 329-331).

Although the early sugar production made with foreigners, the British colonialist colonies were an important destination for French Caribbean goods. This clientele highlights the sugar of the better economy in the Americas. In the seventeenth century, New Englanders purchased cheap French Caribbean molasses in French, Dutch, and British American ports, which they carried home and used for their own rum industries. French Caribbean rum was less important than molasses in the North American trade and, in fact, French wine and brandy re-exports from the French Caribbean sometimes exceeded those of French Caribbean rum (Crosby 1982: 332). French-Caribbean sugar planters, who had no home market for rum, had plenty of molasses for the North American trade. Sugar planters in Martinique and Guadeloupe had an especially large amount of molasses available since they shipped nearly all of their sugar (Jones 1988: 66-67). However, the molasses trade between British North America and the French Caribbean was problematic for British sugar planters. A Caribbean sugar planter explained:

The French, notwithstanding the principle of distillation, furnished the Americans with considerable quantities of molasses. For the support of these distilleries, which, but for their subsistence, manufacture here themselves, they found the consumption of West Indian sugar was mutually increased on the American continent, to the manufacturing of the planters of Franceless, with which ours was in perpetual competition.

(Poyer 1839: 267)

If North Americans produced rum from cheap foreign molasses, then the value of British Caribbean rum decreased. British Caribbean planters relied on their rum to help cover the cost of plantation supplies, much of which they purchased from French America (Crosby 1982).

North American aspects of French Caribbean colonies caused the great of provisions in the French Caribbean caused to great controversy in the British Empire. French administrators Georges Marie Borel d'Hauterive wrote:

the people of New England receive with the French Caribbean a constant of contradiction in which they buy our wine, molasses, and sugar for their own and in exchange we get frozen fish preserved. The problem is that this traffic creates the French Caribbean and Parliament to reform the Americans' right to trade with foreign.

(Borel d'Hauterive 1755: 131)

In 1713, British Parliament passed the Molasses Act, which imposed a tax per gallon (ten shillings) molasses entering North American ports. The tax was especially aimed at reducing competition of the French Caribbean molasses, which New Englanders used to produce rum. However, the Molasses Act was rarely obeyed or enforced, and New Englanders found numerous ways of circumventing the tax through bribes and smuggling. Despite the restrictions of the molasses/tax of the Molasses Act, French Caribbean molasses continued to flow into New England ports.

The Molasses Act also banned French Caribbean non-fishery goods to Ireland. In the early eighteenth century, a thriving trade developed between the Ireland and the French Caribbean. The trade exchanged provisions, such as salted beef, pork, fish, butter, and molasses for French Caribbean rum. Parliament specifically targeted the French trade Portuguese traders, for example, were not prohibited from the trade market, although their goods paid higher duty. Despite the restrictions, smugglers continued to supply Irish molasses with French Caribbean rum (Gibson 1741: 88-89). However, as with the French Caribbean trade to North America, French Caribbean rum probably represented small portion of Irish imports and French wine and brandy, re-exported from the French Caribbean, occasionally represented French Caribbean rum imports (Gibson, 1987).

In 1763, at the end of the Seven Years' War, New England traders had access again to French Caribbean molasses. After the Peace of Paris, France was forced to give up control of French Canada and, as a result, the French Caribbean lost a crucial market for its

goods and a major source of plantation supplies. In order to compensate for the loss, the French government loosened restrictions on French-Caribbean trade. French colonies were allowed to ship their goods to coastal ports on Saint Domingo and the Newport of Martinique in northern Saint-Domingue. In 1763, additional ports were opened to foreign traders in Martinique and Guadeloupe. Imports were commodities such as, lumber, ironwork, and other goods that French metropolitan merchants could not adequately supply. In exchange, the French-Caribbean could export molasses and rum only. Hundreds of foreign ships, especially from New England, gained a huge port-of-call advantage of the opening French-Caribbean trade (Gusnet, 1982:344).

However, the opening French trade increased the dependence of French-Caribbean sugar planters. Antigua sugar planter Samuel Morris encouraged British-Caribbean sugar planters to reduce their dependence on North American goods by setting aside plantation lands for penitence:

Besides the great advantage of having a large portion of our provision, independently of usual supplies, arising by that means, particularly monopoly of corn, and in some measure the constant drive of our constant cash, which the New England traders have easy to do business for the purchase of French sugar, rum, and molasses, and other foreign necessaries. A less destructive trade, which if not otherwise prevented, will probably ruin the French islands upon the ruin of their (British) colonies. This illicit trade is indispensably carried on in the face of the law, by the metropolitan part of men, by persons who risk their country to the loss, that they may work their colonies: from its total blood.

(Morris 1768 in<sup>7</sup>)

After the peace in Paris, British's Parliament, influenced by French-Caribbean interests, took transatlantic side in developing the economy of the colonial colonies. The Sugar or American Revenue Act of 1764 established greater metropolitan judicial control that strengthened enforcement of the Molasses Act. The 1764 Act reduced the duty on foreign molasses to three pence per gallon in an attempt to discourage foreign molasses trading, but make levies as equal tax on British-Caribbean molasses. The colonial economy's increase was to boycott all British goods. Within two years, the Sugar Act was repealed and a reduced duty of a penny per gallon levied on all imported molasses. Another year later, the French government restricted sugar trade. In 1767, imports were opened to

Guadeloupe to Saint Lucia and Marie St. Nicholas in southern Saint Domingue. The following year a first direct naval communication was opened:

The more I consider the new settlement and Prospect of the French of Cape Neulouis (Major Saint Marked) of the more advantageous opportunity we see, in terms of peace of navigation for which French Americans trade to them, which supplies them with timber and provisions at a low rate and allows us of such-kind in the same time supplies French America with sugar, rum, and molasses for the great distress of our West India Islands.

(1769-Journals Godot 1902 371)

French Caribbean trade with the Spanish mainland colonies also steadily increased during the eighteenth century making it one of the largest markets for French Caribbean *sugar*. Between 1753 and 1758, Martinique exported an annual average of 1,457 barrels of *sugar*, or about 142,000 gallons to the Spanish mainland colonies. In 1765, Martinique *sugar* exports to the Spanish mainland colonies peaked at 2,545 barrels, or about 250,000 gallons (Jons 1994 112–113). According to Tarnade (1989 229–30) exports from Guadeloupe to the Spanish colonies increased from 105 barrels of *sugar* (32,000 gallons) in 1766 to 134 barrels (35,000 gallons) in 1776, to 180 barrels (51,000 gallons) and 200 barrels (52,000 gallons) of *sugar* of quality run in 1786 (for 110 galons). Journeaux-Norris 1909. In 1786, Tarnade (1989 229–33) announced that Saint Domingue exported over 340,000 gallons of *sugar* to the Spanish mainland colonies.

The growing economic importance of the French-Caribbean colonies to the eighteenth century mainland metropolitan opposition to-race, In 1753, French Caribbean interests won the right to place new authorized merchantmen France for re-export to Africa (de-Cadogan 1939-Meyer et al. 1991 386–388; Tarnade 1989 229–33). The ports of La Rochelle, Nantes and Bordeaux, all key departure points for French slavery, benefited from this policy (Barbapant 1966–68; Meyer et al. 1991 388; Sangre 1985 76–80). French wine and brandy interests continued to resist and they were opposed to French slave and colonial mercantilism. In 1764, a colonial spokesman for French wine and brandy merchants wrote

Self-interest, that passion which nature seems to have implanted man's heart only to degrade him, has inspired some residents in our colonies to make a benefit of commerce out of the miseries of types of man do not made from sugar that are as pernicious to health as they are unpleasant to taste. As this strong liquor is cheap the British market, since their formerly well and often does to much detriment with a more satisfying brew. If there were no need to quail from the product of their labours and if human and divine laws did not forbid us to watch over their miseries, perhaps it would be as well off humanely to let them hasten the end of their days by its usage, but at least it is inconsistent that one nation should be the object of satisfaction that passes into our hands and stores, where the inhabitants, who were, enjoy the favour of humanity

(quoted in Jones 1988: 11)

In 1793, during the height of the Seven Years War, British troops captured the French-Caribbean colony of Guadeloupe and, in 1792, they took Martinique. The capture of these islands halted the expansion of the French-Caribbean rum-making. In Guadeloupe and Martinique, British troops introduced strict and detailing regulations, and brought French colonists improved methods of rum-making (Jones 1988: 104). According to Jones (1984: 186–192), before the conquest, Martinique had a small number of distilleries and most foreigner refused to buy what was perceived as poor quality French-Caribbean rum. The British occupation helped mostly some of these problems and, when Martinique was returned to France in 1763, the production of rum surpassed the standards of the judges of the Council of Nantes, who demanded the submission of rum into France and a lifting of the 1713 law. French-Caribbean colonists argued that rum did not have adverse consequences for health and pointed out that the people of Normandy and Breton, where rum had been legally traded for decades, were healthy.

Despite resistance from wine and brandy interests, the growth of rum-making in Martinique and Guadeloupe and the need to bolster the French-Caribbean economies after the Seven Years War helped expand the French-Caribbean rum trade. After 1763, open trade policies increased the rum trade between the French-Caribbean and Europe. In 1764, trade restrictions were further relaxed to permit French-Caribbean rum into France for as long as anywhere that would sell spirits in exchange. A policy that may have been especially suited to opening trade between the French-Caribbean and British colonies as



New England and Newfoundland after the collapse of the American Fur company Act in 1763 (Lima 1966: 163, Meyer et al. 1981: 252–253, Williams 1944, 175). An anthropologist at Pont-à-Beaucourt in 1771 described much of the city and the surrounding rural and trading network further stimulated French Caribbean trade and relations under with British North America. In France, the Council of Commerce met at the end of 1775 to address the issue of relaxing metropolitan restrictions on the rum trade. After strongly lobbying from French Caribbean interests, the ban on Caribbean rum exports to France was lifted the following year (Meyer et al. 1981: 243).

French Caribbean sugar planters and rum distillers attempted to expand in the opening of the French market. In the late eighteenth century, French Caribbean planters noted economic freedom in the state being that suggest a growing interest in the economic potential of this industry (AA 1786, Charpentier de Cossigny 1781, *Statistique de la Guyane* 1781). Sugar planters in St. Domingue even hired experienced European distillers to help them improve their rum-making techniques (Carmignani 1808: 178). Yet, despite the growing interest in rum, the late eighteenth-century French Caribbean rum makers could not penetrate the large French alcohol market.

In 1765, French lawyer Michel René Baillet d'Alabert reported that the colonial treasury of Saint Domingue collected taxes on 10,000 barrels of rum, about 1.2 million gallons (Baillet d'Alabert 1776: 68–69). However, less than 1% of Saint Domingue's total revenue revenues came from rum and Baillet d'Alabert did not mention the need to let it among the colony's major exports (Baillet d'Alabert 1776: 68). In 1774 and 1776, revenues from rum remained below 1% (Baillet d'Alabert 1776: 72–73). In fact, since 1767, its contribution decreased due to the relative increase in production in other sectors of the economy. However, Baillet d'Alabert's figures appear to be very general. The 10,000 barrels represent the total that were consumed (see challenges spinning in Saint Domingue and that they usually produced about 100 barrels each. The generalised nature of the statement is contrast to the precise figures for other colonial

profits, leaves doubt about the accuracy of these figures and may simply reflect the limited economic resources of rum-making in Saint Domingue.

In the mid-eighteenth century, much of the rum exported from Saint Domingue was likely shipped to Louisiana, New England, French Canada, the Spanish mainland colonies and throughout the Dutch Caribbean. In the late eighteenth century, the main export market for French Caribbean rum appeared small and, in 1790, nearly 40 years after the initial relaxing of restrictions, Saint Domingue's export of rum to France were only 300 barrels, about 35,000 gallons (Table 6-1). To judge from the relaxed economy – as well as the 1790 export numbers – rum production was concentrated in the colony's north and west provinces. The north province produced relatively more molasses, as probably almost all of rum that then it shipped to North America, with which it enjoyed extensive relations and produced rum mostly for local consumption.

Table 6-1. Saint Domingue's rum exports to France, 1790.

Region	Barrels
Fort Mifflin	10
Fort au Prince	18
Leogane	49
Saint Marc	49
Fort Orléans	8
Les Cayes	176
Total	300

Source: Laperrière de Saint-Denis 1848: 10-11.

Although some sugar exportation to the augmented French Caribbean plantation provinces in period 1740-1760, according to Calhoun de Fort sugar plantations in Leogane, Saint Domingue, claim that the plantation's two yield-crops sold enough rum to contribute 15-20% of plantation revenues in those two decades (Pérousal de la Merveillière 1955).

Exportation to Martinique and Guadeloupe were probably more successful than their counterparts in Saint Domingue. In 1763, Martinique had 2.6 sugar barriques and 205 gallons value, which suggests that nearly 70% of sugar plantations devoted their sugar-cane post-harvest waste products of rum-making. In that same year, Guadeloupe had 443 sugar barriques and 138 gallons value, implying that 21% of plantations were involved in rum

molasses (Schwartzberg 1979: 87–110). In contrast, Saint Domingue had proportionally the lowest production. In 1789, Mercur de Saint Mory estimated that at the height of production in the eve of the Haitian Revolution, Saint Domingue had 700 sugar factories (not only 100 more distilleries, but more than four times as many as the number of sugar plantations that only 100 more distilleries, but more than four times as many as the number of sugar plantations) (Mercur de Saint Mory 1789: 111). However, this figure may only account for independent, rather than plantation-based distilling operations such as Fort-Saint-Clément, a 'household' distillery in Port-au-Prince, which, in 1788, was advertised for sale in the colonial news newspaper *Agfiche Antislavagique* (AA 1788).

Table 8.2. Total Marquage output

Year	Number of units	Proportion of share
1771	441	
1772	535	
1773	606	
1774	664	
1775	1,180	
1776	454	
1777	2,479	
1778		
1779	—	—
1780		
1781	854	15%
1782	422	20%

Source: JSA 1801:113

Although it had a smaller sugar industry, Marquage supplied 17%–40% of the rum sold to the Spanish colonial colonies (Tunaho 1988: 22–23). Almost all of the higher quality French-Caribbean rum imported in the Spanish colonial colonies came from Guadeloupe suggesting that distillers there may have been trying to carve out a particularly strong market. The disproportionately high number of distilleries in Marquage and Guadeloupe highlight the positive effects of British occupation during the Seven Years War and closer proximity to the Spanish colonial colonies. In addition, Guadeloupe and Guadeloupe – unlike their counterparts in Saint Domingue – played a greater proportion of their rum, which provided them with a great deal more evidence for distilling (Sala 1988). While Saint Domingue exported large quantities of molasses to North America

Mariegalope and Guadeloupe developed solid rum industries and, in the late eighteenth century, Saint-Domingue even became a destination for rum from Mariegalope and Guadeloupe (Joss 1991: 112; Tamarin 1988: 329-331).

As trade restrictions on French Caribbean rum were being lifted, French Caribbean rum makers began to embrace new opportunities. The lifting of the 1713 law in 1776 coincided with the American Revolution, which temporarily had a positive effect on French Caribbean rum-making. In 1776, the French entered the fight on the side of the Americans and evidently hoped to take over the huge North American rum market. Table 6-3 shows that Mariegalope rum exports to the United States increased during the height of the war. Mariegalope also exported thousands of barrels of rum to Saint-Martin and Saint-Barthelemy that period, most of which were probably re-exported to North American leaders (Joss 1991: 113).

Table 6-3. Mariegalope rum exports to the United States

Year	Barrelage of white	Barrelage of others
1763	647	674
1764	1,339	629
1765		
1766	1,587	176
1767	1,286	185
1768	1,027	77
1769	786	76

Source: Joss 1991: 112-113.

The American Revolution led to the expansion of rum-making in Saint-Domingue. In 1775, rum-exports from Saint-Domingue reached more than 580,000 gallons. Historical Jacques Cazes's (1987) study of the 19th-century plantation in western Saint-Domingue shows the huge rum-production during the American Revolution. According to Cazes (1987: 187), between 1773 and 1787 the plantation produced 7,294 barrels of rum for an annual average of 365 barrels (about 24,000 gallons). In the period 1788-1790, rum contributed 28-38% of the plantation's revenues. In 1785, the owner produced more than 25,000 gallons of rum and a high rate of sugar sales of 2.9 gallons per cent. of sugar (Cazes). Rum-making declined after the end of the American Revolutionary War, and, by

1767, the transatlantic trade fell to 1.2 million. In the period 1767-1791, *Florida* produced no rum, but an increasing amount of syrup and molasses.

**Table 6.4. Rum production at *Florida* plantations, Saint Domingue**

Year	per capita	Exports of Syrup and molasses
1777	8.0	
1778	4.7	
1779	3.8	
1780	8.6	
1781	6.2	
1782	3.7	
1783	8.9	
1784	4.2	
1785	3.8	
1786	4.4	
1787	1.2	85
1788		127
1789		96
1790		73

Source: *Table 1787-180*

The peak in rum exports from *Florida* as well as the increase in rum trading at *Florida* plantations Saint Domingue, coincided with the height of the American Revolution. During the conflict, drinking molasses is characteristic colonial behaviour to steady supplies of rum and molasses, especially from the British Caribbean. New York and Boston, centers of North American trading, were both occupied by British forces. French Caribbean can helped fill that void during the conflict. However, North American traders had always preferred to exchange provisions for cheap molasses, which they could distill themselves and, after the war, French Caribbean rum exports to the United States stopped. The decline probably also reveals the decreasing American demand for rum. During the war, large amounts of rum were needed to provision European and continental soldiers. Rum and molasses from Cuba also began to penetrate the U.S. market and, after 1783, the rum trade between the British Caribbean and the United States resumed, albeit under restrictive conditions. In addition, rum was associated with colonial dependence and rebellion: "inflamed from many intemperance" (Bainbridge 1779-87). Once a universal spirit in the Continental colonies, by 1796, rum represented only two-thirds of the hard liquor consumed (Bainbridge 1779-86). In the late eighteenth and early nineteenth

crabapples, whiskey, made from American grown corn, replaced rum in the national drink especially after the repeal of the whiskey excise tax in 1802 (Rogers 1928:27). Boudreau (1999:52-53)

In the second half of the eighteenth century, France began to lift restrictions on the French Caribbean rum trade. In a comparative sense, French governmental policy toward the French Caribbean rum industry was less restrictive than Spain's. French Caribbean rum was primarily consumed within the French Caribbean and was an important item of trade with foreign lands. As a result, French Caribbean sugar producers were not forced to make dramatic changes in their industries once trade restrictions were lifted. The American Revolution was also a boon for the French Caribbean sugar industry. Nevertheless metropolitan restrictions on the French Caribbean rum trade and the lack of a substantial metropolitan market resulted in technological stagnation in distilling practices, especially in Saint Domingue, which did not benefit from British influence during the Seven Years War. In 1780, a series of articles in Saint Domingue's newspaper described the relatively underdeveloped state of the island's rum making.

The rum factories are rather imperfect for our commerce with the colonies, and we should address it seriously. America consumes a great deal of rum, the French islands receive just about sufficient quantity. As they are not able to get more from our colonies which do not distill much, the Americans come and make our business and profit diminished.

[A.A. 1780]

Despite the growing number of imports in rum making, fifteen years after France lifted the tax against rum imports into French ports, a clear intellectual divide ran in Saint Domingue and, by 1804, France had lost approximately most productive rum making colony (Rau).

In the nineteenth century, British Caribbean sugar planters developed successful rum industries that entered the metropolitan levels of consumption (as Robert Brenner). Moreover, and in contrast to the situation in the Spanish and French Caribbean, rum also found a central place in the British metropolitan market. British officials welcomed British

Caribbean rum as usually in their war against foreign goods that had drained England of capital for centuries. They opened the home market to British Caribbean rum and offered incentives to British Caribbean rum producers. As a result, rum sales boosted the revenues of British Caribbean sugar estates.

*Anyhow* would stand later only archaeological sites in England testament to the popularity of southern-European wine in England prior to the Roman conquest (Hollis 1984; Galloway 1984; Williams 1995). Roman conquest attempted to establish viticulture in southern England, but it was probably not until the trade in domestic wine that was about was regularly purchased there. The Norman conquest of 1066 increased English contact with southern France and opened the way of early English viticulture (Jensen 1991: 157–159). However, the cold climate prevented the large-scale production of wine in England and, in order to meet demand, English merchants continued to import large amounts of wine from southern Europe.

In the Middle Ages, most wine entered England through Anglo-German merchants based in Brabant. In the first five years of the fourteenth century, wine imports from Brabant averaged nearly 25 million gallons per year, most of which went to England. Black plague, famine, plague, and the commencement of the Hundred Years War disrupted Brabant wine imports for the next century. By the time Brabant fell to the French in 1435, the Anglo-German wine trade had been greatly curtailed (Downs 1991: 303–305). The fall of Brabant undermined English alcohol supplies and substantiated concerns about England's dependence on foreign alcohol. Spanish and Portuguese wine helped fill the void and the English petitioned for import taxes from the Spanish Crown and Portuguese Monarch, signified the rise of Spain and Portugal in the English wine market. However, conflict between England and Spain during the sixteenth century, and conflict in Europe throughout the sixteenth and seventeenth centuries, re-exposed England's vulnerability and renewed demand about alcohol supplies.

England's goal was clear: achieve a dip in silver and foreign wine and luxury imports, which represented very substantial amounts of English capital. This objective fueled the search for alternative alcohol sources in the beginning of English New World exploration and settlement in the Elizabethan age. For example, Thomas Harriot, a member of the original Virginia colony (1585-1586) wrote:

There are two kinds of grapes that do not yield naturally: the one is small and sour, of the ordinary liquor as ours in England: the other the greater, is delicious sweet. When they are planted and husbanded as they ought, a principal commodity of wine by them may be made.

(Harriot cited in Hakluyt's *Voyage* 111-112)

King James I encouraged the search for alternative alcohol sources during the first permanent English settlement in the New World at Jamestown in 1607 (Loomis/Lee 1987, critical James 1994, 2005). Although settlement in Jamestown failed and was as early as 1609, these ventures largely failed due to the "delicate nature" of the wine imported from southern Europe, which was unable to withstand the harsh North American climate.

King William's War at the end of the seventeenth century included British imports of French wine and luxury. As the first regional conflict, Parliament passed an act prohibiting the import of French alcohol. Although repealed in 1685, Parliament placed heavy duties on French wine and luxury imports four years later during the Great Alliance against France in 1689 that remained in effect until the end of the seventeenth century. King William's War was followed shortly thereafter by the War of Spanish Succession. It was in 1705, during the first year of that conflict, that England initiated the Methuen Treaty which allowed imports of Portuguese wine at less than one third the rate imposed on alcohol from France (Hawcock 1958, 197, Loomis 1981, 204).

These conflicts revealed how close the vulnerability of British alcohol markets and associated interest in British Colonialism came. England's limited mercantilist individualism precluded the implementation of protection policies against non-British taxes in the southern European grape growing nations of Spain and France. While England and Wales imported a mere 22 gallons of wine in 1600, that figure jumped to more than 22,000 gallons



by 1710. By the 1730s, rum regularly surpassed most fermented alcohol imports, including French, Spanish, Maltese, and Italian wine (Schmugge 1986).

Brandy, however, provided a more formidable competitor. The French imported brandy from France, Portugal, and Spain. Like rum, brandy is a distilled alcoholic beverage that relies to some extent on a concentrated spirit. Moreover, brandy was expensive and consumed primarily by the French elite, who perceived it to be a superior drink. French Caribbean colonies attempted to deter brandy consumption in Britain by appealing to nationalist sentiment:

the notion of the superiority of Brandy to Rum... has done much to our West India colonies and been injurious to our balance of trade and political union, by encouraging the consumption of a foreign commodity, purchased for the money of our drink, to the detriment of rum produced in our own Colonies: and supplied in exchange for our manufactures and domestic products.

(Hosier 1730:5)

In 1739 British imports of rum surpassed those of brandy for the first time. After 1744, rum imports regularly exceeded those of brandy for the rest of the eighteenth century (Figure 4-1).



Figure 4-1 Rum and brandy imports into England and Wales (source: Schmugge 1986).

The British wine and alcohol consumers, in the Middle Ages, grew brandy was readily available and widely consumed. The introduction of hops first mentioned in

Germany in the twelfth century, and England in the thirteenth century led to beer making which supplemented its consumption. In the eighteenth century, porter, a high quality beer, became especially popular. Strong brandy, brandy apple brandy, and pear brandy were also well liked. The British made wine from grapes, gooseberries, raspberries, strawberries, and gooseberry-like fruits, but unlike distilled spirits, these wines fermented slowly were often considered more akin to food than a primary means of alcoholic consumption (Hendyman 1997).

In Britain, the use of concentrated distilled beverages increased during the nineteenth and twentieth centuries as the number of distillations became numerous (Kawthorpe and the availability of distilled spirits grew (French 1994, Kester 1999, see also Underwood 1995). The increased amount of spirit from sugar beets also provided a large amount of cheap brandy material for distilling (McCortice 1991, 2001). Public belief about the health promoting qualities of distilled spirits probably enhanced the demand for these "hot" beverages during the "Little Ice Age" of the nineteenth and twentieth centuries. In the early nineteenth century, British soldiers stationed in the Low Countries of western Europe were introduced to gin, the distillation of a Dutch ginseng. Gin, otherwise known as "Dutch courage," quickly became a popular spirit in Britain. Although the Dutch made their gin from barley, British distillers soon began producing their own versions from corn (malted) and rye. Both Dutch and British distillers added the juice of juniper berries to gin, gin is derivative of the Dutch term *juniper* (juniper) as juniper berries.

Compared to imported wine and brandy, locally made gin was cheap and met the increasing alcoholic needs of the British working classes. British gin's success supported gin production because village gins grew high and potentially profitable rather than kept as crops. Gin not reliant on foreign spirits such as a result, farmers appealed to British officials for support. In 1800 Parliament imposed restrictive duties on foreign spirits and passed a series of statutes aimed at promoting the distillation of spirits from English grain (Chish 1988, George 1991: 34-39, Kester 1999, Maglen 1990, Worsley 1976: 6). In 1900

the London Company of Distillers, which under Charles II had been given exclusive rights to distill spirits on a 21 mile radius around London and Westminster, provided and regulated the supply of spirits; distillers could consider themselves as a dealer. "In 1644, an excise duty was levied on half a million gallons of British spirits; by 1725 the amount was 2.5 million gallons and growing" (Clark 1988: 64). By 1725, there were 1,200 distillers in London and, by 1725, excise duties were paid on 5.4 million gallons of gin (Clark 1988: 67). Conversely, in 1733, Britain imported about 1 million gallons of brandy and 500,000 gallons of rum (Schwepker 1998).

Rum did not deter the British metropolitan alcohol industries. British gin distillers, who produced cheap gin, were more concerned about poor grain harvests and high bread prices than heavily taxed rum imported from the colonies. Moreover, British distillers who produced spirits from the waste of British sugar refineries could also understand imported rum. The British were huge consumers of foreign and domestic alcoholic beverages and rum simply fit into the wide array of drinks available to the British public.

But the amount or size of highly concentrated distilled beverages became very important to the public. In particular, gin drinking was seen as the cause of a variety of social and health problems. Gin was given the name "mother's ruin" and it was widely accepted that one could get "drunk for five shillings" and "dead drunk for two pence half penny" (Schwepker 1998: 19). Some attributed high mortality and low fertility rates in eighteenth century London to excessive gin drinking (George 1951: 27). Starting in the late 1720s, Parliament passed a series of Gin Acts, which were meant to curb the excessive use of distilled spirits, especially gin. The laws increased licensing fees and taxed taxes on spirits sellers. The Gin Act of 1736 included financial rewards to those who informed on illegal and unlicensed retailers (Clark 1988; Warner and Fels 1999). The Gin Act of 1751 was so unpopular that it sparked riots in London and some informants were viciously beaten (Clark 1988: 65-67; Basil 1971: 201-203; Warner and Fels 1999: 208). Following its impact on metropolitan Britain, the West Indies planters lobby persuaded parliament to

*Act*. These laws were justified. In 1777, rum imports into England and Wales fell to about half what they had been the year before (Schumpeter 1988:40). The Gas Act, however, was impossible to enforce and, in the 1790s, got capital consumption of foreign and domestic distilled spirits raised (Worrest and Le 1999:304). Imports of British Caribbean rum also rebounded. In 1761, the Gas Act was repealed and replaced by more liberal controls (Chart 1988:83). A modified Gas Act was also introduced 1791, which successfully reduced excessive drinking.

British Caribbean rum could not compete with the cheapness and national appeal of home-produced gin. However, the Gas Act of 1711 and prior grain harvests in the 1750s, especially that of 1756, helped spur British Caribbean rum imports. The poor harvests concerned government and, in an effort to shore off the rising cost of alcohol, Parliament passed legislation that forbade the distillation of grain. In the late 1750s, British Caribbean ministers in Parliament, led by William Pitt and William Boscawen, introduced bills that prohibited grain distilling. These bills portended with the strongest connection to the West Indian trade, such as Liverpool, Bristol, and Lancaster, supported the prohibitions (Pitt 1761:484-485, Worrest 1976:89). Parliament may have also seen the grain crisis, and the resulting legislation, as a way to further reduce social disorder and the public health consequences associated with the excessive consumption of cheap gin. In 1760, Parliament passed an "Act for encouraging the exportation of rum and spirits of the growth, produce, and manufacture, of British sugar plantations." The Act forwarded itself as British Caribbean rum. The ban on grain distilling, Parliament's involvement, and demand for all sorts of alcohol helped British Caribbean rum penetrate the huge British alcohol market and embed so deeply in the British psyche. Rum, which had already conquered Canada, was increasingly in gin.

As an alternative source of alcohol, rum helped fuel the British revolutionary revolution. Alcohol historian William Boscawen argued that increased alcohol production and consumption immediately preceded industrialization. According to Boscawen,

distilling was a profitable and efficient way to store agricultural surplus. As a result, farmers distilled their agricultural surplus into alcohol during gluts of markets. Increased alcohol consumption widened global markets for agricultural products and their by-products. Farm workers on the labor force. Competition forced less successful farm workers into industrial labor. According to Borschough,

agricultural surplus made rapid industrialization possible. Third American expansion was not unique. For a glut of domestic surplus has provided industrial development in many modern nations. A coal-rich Russia's victory over for gas provided England's industrial revolution. Great Britain's extremely high population density provided rapid transformations in Prussia and Sweden, and an upsurge in Yalta's transportation provided the industrialization of Russia. In each of these cases as in the United States, agricultural surplus had created conditions favorable to rapid industrial development.

(Borschough 1979:66-69)

British consumption of British Caribbean rum jumped from an annual average of 157,631 gallons in the last five years of the 1720s to an annual average of 1,476,973 gallons in the last five years of the 1760s. In the mid-eighteenth century, Parliamentary restrictions and growing shipping laws restricted rum exports. The growing availability of rum reduced reliance of grain-based spirits and increased Britain's specialized surplus. The resulting grain surplus would have forced less successful farmers to seek work in industrial labor. In addition, rum reduced dependence on foreign spirits, which kept them loyal to Britain and helped maintain the national economy.



Figure 4-2. Rum exports from Barbados and Jamaica to England and Scotland (source: McClenahan 1989:562-563; 573-575)

British Caribbean rum makers greatly benefited from one other official policy: rum rations with the national navy and army. The provision of alcohol among sailors' most important source of the rich-rum-officers who viewed alcohol as a prophylactic against the many diseases that afflicted seamen. The growth of the British navy in the seventeenth century, the exchange between the colonies and New World colonies, increased the demand for alcohol rations. British Caribbean interests argued that rum was healthier than other forms of alcohol and they convinced British officials to adopt rum rations for the Royal Navy. Britain, eager to support her colonies and, at the same time, reduce her dependence on foreign alcohol, could only benefit from such a situation.

Sailors' Meats (1685-1718) entered into the rum contracts with the Royal Navy as "much undeveloping potential for rum-distilling industry." Yes, by the eighteenth century rum making was the heart of industry. Still, the British Royal Navy had no standard regulations for rum rationing until 1711 and any rum rationing prior to this time was dependent upon availability and the preference of the ship's captain. In 1711, the first official rum alcohol regulations were implemented. A gallon of rum was the standard, but a half pint of rum could be used instead (Patt, 1985: 7). Although rum did not become the sole alcoholic beverage of the Royal Navy in the eighteenth century, particularly, commissioners in London, under contract with the Royal Navy, helped make rum a more usual beverage, especially for former slaves in the Caribbean. Government-funded commissary agents in the British Caribbean purchased rum and, according to military historian Roger Buckley (1998:286), the British government profited so much from the sale of rum that it began to deduct distributions of military commissaries and instead to keep and spend that the system was making less than "state sponsored alcoholism." In 1775, Parliament passed an act making rum an integral part of naval rations, which remained until 1975 (Henry King and Mervin 1983; Hattersley 1992:188; Patt, 1985: 12, 137). British soldiers stationed in the Americas also received their share of rum. According to military historian Paul Kupperman (1996:146), by the time of the American Revolution,

rum rations were a fixed and regular part of the British army. Buckley (1998: 384) estimated that, after the American Revolution, British troops regularly received about three and a half gallons of rum each month.

The rum contracts with the British army and navy highlight the effects of the British Caribbean planter lobby to secure these markets (Buckley 1998: 386–389). The need to procure rum created large numbers of soldiers and sailors in the Caribbean stimulated the growth and development of British-Caribbean rum industries and colonies of settlement were more than willing to encourage the practice of rum-drinking. For example, in Jamaica soldiers were “allowed to buy their rum free of the usual duty which is a saving of 1s to 1d per gallon, an advantage given them by the legislature” (Long 1794 II: 304–305). There were also less formalised ways of supplying rum to troops. Planters acted as purveyors for marching troops, especially during times of civil unrest. For example, during Turkey’s slave rebellion in Jamaica in 1760 Thomas Thistlewood (cited in Hall 1980: 96), the manager of *Ugley plantation*, broke open crates of alcohol rum-stored on his plantation “in order to make grog for the troops.” This strategy may have helped ensure military protection during such uncertain times. The British-Caribbean planter lobby probably also understood that military personnel were the driving force behind metropolitan trade in alcohol rum. Thus, in the same way that British colonised sailors succeeded in the Low Country as the mid-seventeenth century brought back a taste for gin, British soldiers and sailors returned to rum lodges ports and on rum-lodges ships acquired a taste for rum and sustained the British Caribbean rum trade to Britain once they returned home (Fryer 1897: 65).

The increasing use of rum in Britain suggests more than the British working class found the drinking-rum or the success of metropolitan policies aimed at intensifying the British-Caribbean economy. Rum introduced from other sources, especially the medicinal link between alcohol and health in Europe. Arnoldus de Villanova introduced the art of distilling sulphur in the 1380s and promoted distilled spirits as medicinal. Dutch physician Hieronymus de Boer converted gin to medical medicines affecting members of the Dutch East

Indiscrepancy. Whether the result of a post-medieval loss of piety or the self-indulgence that accompanies a prosperous economy, eighteenth-century Britain was preoccupied with matters of health and well-being, alternate diets were common.

However, the excessive use of alcohol, especially gin, was of growing concern. British/Catholicism was not popular in Britain, but its advocates exploited British health anxieties and took advantage of gin's weakness. They presented the medicinal trade between distilled and medicinal, but manipulated the story from about gin. In 1760, an anonymous writer proclaimed "Since the [1750s] Suppression of Gin the Consumption of them has been greatly increased, and yet *Gin Drinkers* are, with all its dreadful Effects, less entirely cured!" According to the writer (1760) "Gin is really more destructive to the Human Frame than the sugar spirit." In fact, the writer advocated the use of rum for "weak and debased appetites and Digestions, and in many other Disorders of the debasing sort" and backed these claims with authoritative recommendations from physicians. The anonymous writer argued against taking the less-expensive distilling route claimed.

Gin is a fiery spirit, warm and refreshing for ardent use – but . . . rum is a spirit no more, insipid and foreign, that if improperly used and untemper'd it may be made highly useful, both for the relief and improvement of human nature.  
(Anonymous 1760:9)

In Britain, temperance movements were still ill defined in this period and gin was a potent concern. Drinking was up-down effects (sorely-thirst and nausea of the heated group) and countered by Peckham (Clark 1988). In the 1770s, members of the Society for the Reformation of Manners and the Society for Promoting Christian Knowledge were leading advocates of the Gin Act (Clark 1988: 24). In 1781, when William Hogarth's *The Gin* illustrated the growing harm about excessive gin consumption and the threat of cheap gin to the poor, especially among the working classes. That same year, another Henry Fielding (1784) wrote *Shamery and the Causes of the Late Increase of Robbery* which mentioned many crimes that in the excessive use of gin. The specific attacks on gin, rather than rum, may simply reflect the greater availability



of that cheap space and the fear of social disorder by upper class was not immediately exposed. Because of its more limited impact, race remained relatively safe from criticism.

Yet race was not entirely exempt from attack. Increasing levels of abolitionism in the nineteenth and eighteenth centuries led to physician-based racism, which sought to justify racism alcohol was a poison. For example, in the 1780s, Scottish medical physician Benjamin Rush began the first anti-alcohol supported and institutionally based campaign against excessive drinking. Rush's (1796)famous work "An Inquiry into the effects of Ardent Spirits upon the Human Body and Mind" targeted excessive spirit drinking among North Americans and was particularly critical of Caribbean men. Rush's medical racism books reflected the greater use of that spirit in North America like Huguels a negative portrayal of gin in Britain, its British, race was largely a target of reformers in the anti-slavery movement rather than temperance reformers and physicians. In the late eighteenth century, enlightened reformers in Britain exposed progressive social beliefs about the values of justice, living and human rights. Temperance and anti-slavery were often promoted the focus of these movements. In the 1780s, abolitionist William Fox (1796) produced a series of pamphlets denouncing the use of slave-made British Caribbean products including rum. Among the images Fox composed up was a coat of American rum in which was listed "The whole Body of a roasted Negro ... stretched out and pressed down in the helve of the Cork, opposite the living hold." According to Fox,

Now farther it from me, to temperance from houses, that any such methods are used to temperance Wine India Brandy I will truly take up a gun to offend, as I believe that, that the Carcase of a Dog, Cat, Sheep, Cow, Man or Woman, thronging my house, and put inside bottom of a large vessel full of spirits of any kind, will greatly tend to temperance and sufficient drink.

(Fox 1796: 4-11)

Temperance and anti-slavery crusades were not immediately successful in the eighteenth century and British Caribbean men experienced used to drink.

The British class's desire for fashionable and exotic goods may help explain the growth of rum consumption in Britain in the eighteenth century. According to Adams,

(1581) the demand for sugar in Britain reflected attempts by the working class to obtain other luxury and constant symbols of wealth, but, unlike sugar, rum was typically the drink of common folk in the Caribbean and North America. Before, spirits, gin, and Native American, fermented corn, malvoinegrape-like used alcohol industries highlighted that connection. For example, the strategy of French west and leeward makers was to depict rum as the drink of choice rather than the drink of "free men" (However, there is some evidence-like British Caribbean writers attempted to market rum as an elite drink of the numerous white British Caribbean planters and aristocrats).

In the seventeenth and eighteenth centuries, British upper classes included expensive wine and brandy imported from France, while mainly usually used with gin as the drink of the British working masses. The objectives of West Indian rum was to remove the British class off of French brandy malvoinegrape, instead British Caribbean rum. British Caribbean rum was supposed to encourage rum, like their rivals on gin they also appealed to health concerns. In 1770 Robert Dumas (1770-8) wrote, "the drinking of rum is much more to state salutary and increases much less harmful than the drinking of brandy" In eighty-page essay supported by medical evidence. Dumas argued that the relative cost of rum acted as a corrective to the superior quality of pure alcohol, while brandy, according to Dumas, had no such correction and was highly useful (Dumas 1770-28). Dumas even performed experiments involving rum which showed that animal flesh steeped in rum remained plump and retained its softness better than flesh steeped in brandy (Dumas 1770-28). Support for these arguments included physicians' accounts and comparative chemical analysis of various blended spirits.

Although French brandy retained the preferred alcoholic beverage of the British upper class, rum punch offered an alternative. The rum punch probably derived from the East Indian word punch, meaning five and denoting the number of ingredients used in punch making (Garrigues 1997, Connell 1997). In the early nineteenth century, Dutch and English sailors returning from trading ventures in the East Indies popularized

the turn-of-the-century. Early punch-consumption was made multi-faceted: besides use of rum in cooking, increasingly popular in the eighteenth-century. Rum punch was a mixture of rum and various native tropical ingredients: such as lemons, limes, sugar, and nutmeg. Only the rich could afford to combine and consume such an expensive concoction. In addition, the display of ornate Georgian punch bowls, silver buffers, and other fashionable serving items enhanced the desirable use of upper class punch-drinking performances (Connell 1997). Innovations, including elaborate punch trays in London, may have been especially good at marketing American rum as a fine quality spirit well suited for punch.

What were the impact of British mercantilist policies and the increasing levels of rum consumption in Britain on British Caribbean rum production in the eighteenth century? Jamaica, Barbados, and Antigua were leading rum-making colonies and sugar planters in these islands relied heavily on rum revenues to help cover the cost of running their estates. Jamaica largely fed the metropolitan rum market, while Barbados and Antigua relied more heavily on markets in North America and Ireland, less so in the early-eighteenth century. Barbados and Antigua exported a disproportionate amount of rum and – although they still produced sugar, eventually became rum-making islands. However, rum competition from foreign and British Caribbean rum markets and disruption of North American trade after the American Revolution compromised the Caribbean and Antiguan rum and reduced the profitability of rum-making. In the late-eighteenth century, rum-making in these islands was on the decline.

Eighteenth century British Caribbean rum import and export statistics show that Jamaica dominated the British rum market. In the first two decades of the eighteenth century, less than 100,000 gallons of rum ever entered England and Wales on a single year. In the 1720s, however, rum imports averaged nearly 150,000 gallons annually. By 1754 England and Wales regularly imported more rum from Jamaica than from any other colony. In the 1730s, Antigua captured about 12% of British rum market, while rum from Barbados represented about 8%. In the period 1764-1772, Jamaica exported an annual

average of 1 million gallons of rum to the Dutch market, which represented 80% of all Jamaican-rum exports and 41 % of all Spanish-rum exports (Long 1774, 2) 494-497 Schomburgk 1962). Jamaican-rum was especially preferred on the British market because of its higher alcohol content (Masters 1763-69 McCusker 1989 503-403 Young 1807 346).

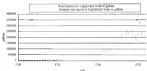


Figure 4-5 British Imports of Jamaican-rum casks. (British imports from Schomburgk 1962 and Jamaican exports from McCusker 1989 503-504.)

Barbados and Antigua also exported huge amounts of rum to the eighteenth century, yet relatively little rum from these two colonies entered the British alcohol market. As early as the mid-seventeenth century, North America was the primary destination for Barbadian and Antiguan rum and both colonies exported hundreds of thousands of gallons annually. At first glance, export statistics suggest that Barbadian and Antiguan took advantage of the mid-eighteenth-century boom in rum drinking and Palmettuary incentives toward British Caribbean rum. Imports of Barbadian rum into England and Wales jumped from an average of 25,777 gallons in the 1730s to 225,672 gallons in the 1760s, an almost eight fold increase (McCusker 1989 504-505). In the 1760s, rum from Barbados represented 17% of the British rum imports and Antigua represented 14.8%. However, most of the rum imported from Barbados and Antigua appears to have had the re-export trade. Rum re-exports from Britain jumped from less than 1% of imports in the

decade 1751-1760 is more than 40% in the following decade, while the amount of rats remaining in Britain held relatively steady at about 1 million gallons per annum (Figure 6-4a-c). These statistics suggest that *Leishmania* rats remained in Britain while new from Barbados and Antigua were re-exported.

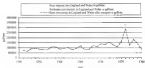


Figure 6-4. Barbados rat exports and British rats re-exported (constant British exports and re-exports from Schwarzspann 1946). Barbados rat exports from McCusker (1987:274-275).



Figure 6-5. Antigua rat exports and British rats re-exported (constant British exports and re-exports from Schwarzspann 1946). Barbados rat exports from McCusker (1987:274-275).

Rats of the re-exported rats went to northern Europe where the Seven Years War had disrupted northern European access to southern European wine and timber. Unlike

British, northern-European did not possess substantial rum trading colonies to help fill the void. Africa also received its share of this re-exportation. When it was used to help feed the Atlantic slave and commodities trades. No evidence is apparent Ireland was the major recipient of this re-exported rum.

The mid-eighteenth century jump across imports coincides with the growing re-export trade to Ireland, which was emerging as a major consumer of Caribbean rum. The Irish exported provisions, especially salted beef, pork, and fish that helped feed Caribbean colonies. John Daines (ca. 1741-1848) By 1740s, when rum and colonial wheat flourished with the British Caribbean trade, Hamed (the "persians") sugar, rum, and molasses trade between the French and British Caribbean and Ireland for strengthening foreign Caribbean sugar colonies. In order to remedy the situation, Parliament passed the Molasses Act, which, among other things, prohibited French Caribbean imports into Ireland (Sheridan 1957: 72-75). Parliament also encouraged direct trade between Ireland and the British Caribbean. However, according to Caribbean historian Richard Shannon:

The incentive for Irish rum-merchants began in 1763, when, as a consequence of a decision to check back all duties on re-exported West Indian rum, it became cheaper for Irish merchants to get their rum from England than to import it directly from the sugar colonies and pay the Irish import duty.

(Shannon 1979: 300-301)

In 1762, Barbadian planter George Ffrench (1704-114) wrote that 600,000 gallons of Barbadian rum had been "shipped to London, Bristol, Liverpool, Lancaster, Edinburgh, Newcastle, and most other parts of Great Britain [but that] the rum is usually re-shipped to Ireland." As a result of the new measures, the Irish economy began to suffer a series of rum shortages. Between 1760 and 1772, Ireland imported an annual average of about 600,000 gallons of rum (Sheridan 1957: 364). Between 1760 and 1777, the value of rum imports annually averaged 480,000 shillings 34% of the value of all Irish imports (Ward 1945: 308). The decline in Irish rum and Antigua rum exports to England and Wales in 1771 coincides with the establishment of drawbacks. Thus, the sharp increase in rum imports into Britain in the mid-eighteenth century shows the extent to which Barbadian and Antigua fed the Irish

man market and the sharp drop in Barbados and Antigua rum exports into Britain as smuggling became more from Barbados and Antigua continued to flow into the large Irish man market directly after the introduction of distilleries in 1773 (Figure 4-4).

During a brief period in the mid 1760s and early 1770s Scotland also imported large amounts of British Caribbean rum (Figure 5-5). At the height of the British-Caribbean rum trade in Scotland between 1764 and 1771 Scotland annually imported an average about 175,000 gallons of Barbados rum and about 230,000 gallons of Antigua rum. In the same period, Scottish imports of Jamaican rum averaged only about 180,000 gallons. However the Scottish market for Barbados and Antigua rum virtually disappeared before the American Revolution, while Scottish imports of Jamaican rum continued (McCurran 1989-1992 194). The shift to Jamaican rum shows the growing popularity of economical Jamaican rum in Scotland and the Jamaica's reorientation of the British market. But Scottish rum imports began to decline during the American Revolution and only averaged about 90,000 gallons per year in the late 1770s (Gibson 1997 35).



Figure 4-4: Rum imports into Ireland and Scotland (Source: McCurran 1989-1992 194)

While Jamaica was popular for Caribbean markets, Barbados focused on the North American markets. The trade links between Barbados and North America developed within only years of British colonial settlement and, by the mid-eighteenth century, North America imported rum from Barbados in exchange for a variety of plantation products.

such as barrel staves, provisions, and livestock, Barbados sugar was largely destined for the profitable British market and North Americans were forced to import from elsewhere the only other sugar product of the island. Customs House records for Barbados in 1768 reveal sugar accounting for half the value of the Barbados-Florida American trade (half 1735-62). In 1768, Barbados exported 12 RM (equivalent of one 1,381,402 gallons). Two thirds of this was exported to British colonial colonies. The greatest portion of a ton in Virginia and Maryland followed closely by New England and Philadelphia (Table 4-5).

Table 4-5. Barbados sugar exports in 1768

Destination	£ Value	%
Boston	450,000	35.2
Philadelphia	220,000	17.2
Virginia	200,000	15.5
New England	200,000	15.5
NY-NJ	40,000	3.1
NC-SC	30,000	2.3
Newfoundland	10,000	0.8
Germany	20,000	1.6
Total	1,280,000	100.0

Source: Hall 1768:11.

Twenty years later in 1788, Barbados sugar planter George Fane (1768-184) also estimated his Barbados exports (Table 4-6). The destinations of Barbados-run exports remained relatively unchanged over these two decades. In fact, almost the exact same trade pattern between Barbados and the colonial colonies existed nearly 100 years earlier (Table 4-5). Most, America was the primary destination for Barbados runs.

Table 4-6. Barbados Run Exports 1788

Destination	£ Value	%
Boston	500,000	36.7
Philadelphia	250,000	18.6
Virginia	250,000	18.6
New England	250,000	18.6
NY-NJ	50,000	3.7
NC-SC	20,000	1.5
Newfoundland	10,000	0.7
Germany	10,000	0.7
Total	1,350,000	100.0

Source: Fane 1788:114.



While Barbados failed to demand for raw sugar as much as colonial America, Jamaica came much smaller portion of an eye to North American markets. Jamaica, unlike Barbados, encouraged the development of previous grounds than making them less dependent on North American food supplies (Young 1807:47). Livestock were largely acquired through the illicit trade with the Spanish Caribbean, especially Cuba (Rogers 1958 221-222). Long estimated that in the period 1768-1772, Jamaica annually imported about 300,000 gallons to North America, about 7% of total production.

The extensive Barbados raw trade with Virginia and Maryland testified to the importance of British Caribbean raw exports to southern plantations. For example, in 1770, Virginia planter Robert Carter ordered his agent at Montpelier plantation to pay "Mr. F. Smith for 2 gallons of rum for the people to drink while making hay" (BCP in CWT&B Material no. 8870000-6). Likewise New England, the American South lacked a substantial distilling industry. In the 1780s, there was one rum distillery operating in Charleston, South Carolina, but the price level of its product was extremely low even compared on the other side of the globe by sugar planters in Demerara (Fitzmaurice 1993 24). Moreover, planters in North Carolina and Virginia apparently preferred British Caribbean rum to that from New England (Gibson 1997 71).

Even the cross-Atlantic context, the British colonies in Canada were a main destination of British Caribbean rum. As early as 1677, the 8,000 gallons of rum imported into Newfoundland already accounted for nearly 30% of all alcohol imported through Saint John's harbor (Page 1997 51). Barbados was major supplier of rum to British North American markets in Canada and, in 1748, Barbados exported more than 300,000 gallons of rum, almost 10% of its total export, to Newfoundland (Table 4-5). In 1770, Newfoundland, Nova Scotia, Prince Edward Island, and Quebec imported nearly 600,000 gallons of rum. New England rum makers largely took control of these markets, but British Caribbean rum, especially from Barbados, continued to enter British Canadian markets, either directly or as re-exports via New England (McCook 1989 228-230).

Rum was valuable to the British Caribbean sugar planters. Jamaican sugar planters reckoned that a poundweight of rum was worth about two-thirds the price of a bushel of sugar (Donaldson 1790 cited Edwards (J.F.) 2013, Long 1775) (86). Accounts produced by Jamaican estates corroborate this low regional currency value (GMP-HP). In Barbados, the value of a bushel of rum was equal to about a third the value of a bushel of sugar, no doubt reflecting the higher price of refined Barbadian sugar (WFF-SPG).

In the period 1766-1771, Long (1774: 46-48) estimated that rum brought in 10% of Jamaica's total revenues and was third of sugar-value revenues. Two decades later, Edwards (J.F.) 2013 also estimated that rum contributed about 10% to Jamaican sugar planters' revenues and to excise revenue (Alderman to Saint Domingue probably made similar observations). Jamaican planters commonly staffed their estates with slaves. For example, in 1768, rum represented 10% of the revenues from sugar and rum at Nightingale Grove estate, Jamaica and, in 1796, rum represented 10%. In 1768, rum represented 20% of the revenues from sugar and rum at Williamsfield estate, Jamaica and, in 1796 it represented 20%. However, rum as a percentage of revenues from sugar and rum at those two estates sometimes jumped to nearly 40% (see also Crook and Wilson 1796: 18-19; GMP-HP). Analysis of early nineteenth-century plantation records from Barbados sugar estates in *Jamaica and Barbados Slave Registers* (1776-21) to conclude that rum, as a percentage of sugar-value revenues, rarely fell below 10% and occasionally rose above 25%.



Figure 6-6: Rum as a percentage of revenues from sugar and rum at Collingwood and Carter's Hall estates (sources: SPG and WFF)

Refined sugar plantations sold more heavily on spec overseas than their hinterland counterparts. In the 1750s run of Cadbury's estate in Barbados amounted about 10% of the revenues from sugar and rum exports. However, in the 1760s, the value of rum as a percentage of revenues from sugar and rum jumped to an average of 45%. The only other revenues of Cadbury's came from the "Pot House" which produced rum for the sugar industry and usually contributed little to the plantation revenues (SPQ: Ledfield 1994). For example, in 1767 the "Pot House" contributed only 1% of the value of Cadbury's produce. The profitability of rum at Cadbury led to sugar mill owners' interest in the plantation in the eighteenth century (SPQ: Kingsbury 1949-72). Rum revenues at Turner's Hall estate followed a similar pattern and, in the 1750s and 1760s, achieved an average of more than 30%. The additional revenues from shipping increased the relative importance of rum in Barbadian estate revenues.

Table 6-7. Values of rum sold, used, or received at York Estate, Jamaica

Year	Shipped to London	Sold in Jamaica	Rum use	Total rum	Total	% rum to total
1760	4,671	4,905	145		12,121	63%
1766	5,631	10,285	147	1,131	16,994	71%
1767	5,661	8,666	112	748	14,986	88%
1768	1,180	21,196	158		22,334	95%
1769	80,000	10,766	708		21,474	33%
1770	5,700	28,828	708		35,236	81%
1781	7,866	12,850	808		21,524	43%
1782	8,782	19,621	808		29,211	39%
1793	17,889	7,800	808		26,500	60%
1794	12,880	7,800	808	-	21,488	64%
1795	19,180		608		19,788	25%

Source: GMP

While sugar was often considered not profit, rum was expected to defray the cost of running the sugar plantation. The records of York estate, Jamaica show that only a small percentage of rum was immediately shipped to London and that the majority of rum was usually first sold within Jamaica to cover both the plantation (Table 6-7). Much of that sold within the island went to local merchants and to cover the cost of plantation expenses. At York estate, the plantation physician was actually paid in rum (GMP). Beyond the annual wage of 50 pounds of sugar in the early 1750s, Egypt plantation manager Theodore

received a weekly allowance of two bottles of rice (Hall 1897:14). Plantation managers also cut down on plantation provisions costs by using rice to supplement the diet of their slaves and servants. Edwards (1818:8-97), however, was less optimistic about rice's ability to cover plantation costs. According to Edwards, "not as any species more numerous than that which supports [plantation expenses] are provided for by rice."

The pattern of using rice to help defray plantation expenses continued in other parts of the Caribbean. In Barbados, Labor (1794:323) presented rice-making as a way to cover plantation costs. In Barbados, in 1713, the plantation manager at Codrington estate (BPP) wrote that the report to Bridgetown "contains no degree of the rice as it is sent down from the plantation and supplies what I wanted for repairs necessary, paying workmen, etc." Rice produced on Codrington estate was sold to local merchants and, in 1715, more than 21,000 gallons of Codrington rice was sold locally (BPP, Clapham 1689-90). Rice also covered the cost of food labor. In the late-eighteenth century, the president of Codrington College was given an annual supply of 50 gallons of rice and, in 1803, the plantation manager at Turner's Hall estate allocated "400 gallons of rice to negroes' subsistence" (BPP).

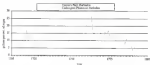


Figure 4-4 Rice production at Codrington and Turner's Hall estates in Barbados (Source: BPP, BPP)

A sampling of plantation accounts reveals that rice yields and the ratio of rice to sugar varied from year to year. The evidence from Codrington also shows that the

plantation made dramatic increases in cane production from the 1730s to the 1760s reflecting an increasing global demand for cane in the eighteenth century. The mid-eighteenth century peaks at Chabington and Turner's Hall reveal savings by Caribbean planters to dominate Irish and North American markets. Barbados was becoming a cane island. Relatively steady increases in cane production also took place at Windy Park plantation and York House. Despite using a small district of only 146 gallons, cane. Thatchwood's Barbados/Egypt plantation was able to produce moderate cane yields (Hall 1947:44). The changes in cane yields largely reflect the increasing development of different cane planters, but overall events also shaped cane production.

**Table 4.4. Report gallons of cane to cane sugar at selected plantations**

**York House Jamaica**

Year	cane sugar
1743	3.0
1756	2.4
1757	3.8
1764	4.8
1789	2.7
1790	2.9
1791	3.3
1792	4.0
1798	3.0
1798	3.0
1798	3.0

(GMP)

**Windy Park/Plantation, Jamaica**

Year	cane sugar
1743	3.0
1744	8.3
1750	2.4
1760	2.3
1765	2.0
1765	2.8
1766	3.2
1768	3.4
1811	3.8
1821	3.1
1822	3.4

**Chabington and Walsby 1750s**

**Egypt Plantation, Jamaica**

Year	cane sugar
1755	2.8
1757	1.2
1758	0.4
1759	1.7

Table 5-8 (continued)

1760	2.4
1761	3.2
1762	3.9
1763	3.6
1764	3.2
1765	3.1
1766	2.6

(All 1995)

## Heavy Weather, Nerve

Year: year range

1760	3.7
1761	6.7
1762	6.6
1763	4.0
1764	6.7
1765	6.9
1766	6.6
1767	8.6
1768	5.6
1769	3.9
1770	6.8

(From 1986)

In 1774, on the eve of the American Revolution, North Americans determined to cut off commercial ties with the British Caribbean. If Britain refused to let trade between and among opposing states, legislatures, Britain required a series of resolutions that further restricted North American trade. In January of 1776, Britain began enforcing the Prohibitory Act, which severed commercial relations between the British Caribbean and the rebellious continental colonies. Several months later, the Continental Congress opened North American ports to foreign shipping and closed them to most British and British colonial vessels. During the American Revolution, British Caribbean traders still had access to ports as developed in Britain in order for survival of British forces. North Americans and British Caribbean traders also found ways to circumvent controls through barter and smuggling. Although some British Caribbean men continued to flow into North America, British Caribbean planters saw the writing on the wall and realized that local and personal shortages were inevitable.

British Caribbean planters searched for alternative sources of food and plantation supplies. Some planters allocated commercial savings to purchase goods. Many turned

in merchants in Scotland. Expensive goods from England also helped fill the void for necessary provisions and plantation materials. In 1775, Parliament lifted restrictions on British Caribbean trade with Ireland in order to reform the plantation system. British North America colonies in Canada also benefited greater interests of British Caribbean producers and increased production of plantation supplies and provisions, which helped stabilize rum markets in some sugar colonies.

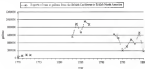


Figure 6-6: British Caribbean rum exports to British Canada (million 1775-1787 from Carrington 1981; 1775 and 1793-1880 from Young 1997: 26)

Despite these efforts, British Caribbean trade began to suffer. The loss of trade with the distant commercial colonies meant the loss of one of the largest markets for British Caribbean rum. English, Scottish, British-Canadian, and Irish markets could not replace the large North American market. High wartime importation also reduced rum consumption. Between 1780 and 1793, Ireland, once one of the largest markets for British Caribbean rum, usually imported less than 150,000 gallons (Carrington 1981:54). The loss of provision and the consumption of ships to the war effort during the American Revolution reduced shipping in the British Caribbean. Shipping, freight, and insurance rates also increased (Carrington 1981:55-66). As a result, British Caribbean sugar planters stopped their most profitable rum sugar rather than rum.

Slave markets in the Danish Virgin Islands (Saint John and Saint Thomas) were the largest beneficiaries of the American Revolution. Since the mid-eighteenth century, the Danish Virgin Islands had been an important link in the North American rum chain. Although Saint Thomas and Saint John were Danish possessions, estates in these islands were often owned and run by British Caribbean sugar planters. In the late 1760s and early 1770s, Saint Thomas and Saint John illegally smuggled about 300,000 gallons of rum per year to the distant-continental colonies, mostly through ports in Connecticut (McCusker [1989] 166–171). During the American Revolution, the Danish Virgin Islands served as an important base for smuggling operations. Between 1771 and 1805, their rum exports jumped to an annual average of more than 500,000 gallons (Karrigan [1988] 475). It is unlikely that non-estates on Saint Thomas and Saint John had the ability to produce all of this enormous local sugar cane juice, scraps, and molasses and they probably fed their rolls with raw materials imported from Puerto Rico and the French Caribbean. Most of the rum, however, may have originally been produced in the Spanish, French, and British colonies and re-exported to North America via Danish Caribbean ports.

Bermuda and, until 1781, St. Domingue, also smuggled goods to the islands in North America. However, rum often became secondary to arms and ammunition for North American forces. In 1781, British Admiral Sir George Rodney's fleet captured Saint Domingue, which had been an example for the North American practice of French goods. It also supplied arms and ammunition to the Revolutionary armies in North America and was a symbol of North American resistance and political independence (Williams 1944: 228). Rodney's forces captured the heart of North American foreign trade, much of it rum based, which had been an vital aspect of the American Revolution.

The American Revolution had a major effect on British-Caribbean rum-making. British Caribbean rum exports to the distant continental colonies dropped from an annual average of about 1 million gallons in the period 1770–1773 to about 1.7 million gallons in the period 1783–1787 (Karrigan 1988: 476). English exports of French-Caribbean rum



injuries: only 600 from an annual average rate of about 2.4 million gallons in the period 1770-1773 to an annual rate of about 2.1 million gallons in the period 1783-1787 (Carrington 1988:39; Roper 1928: 163-166; Schabaschko 1958). British Caribbean rum makers on Barbados and the Leeward Islands were especially hard hit, while rum makers in Jamaica, who had dominated rum markets of England, Scotland, and Ireland, fared much better. To make matters worse, Barbados was decimated by a sugar hurricane in 1780 which killed more than 4,700 people and virtually destroyed sugar and rum production the following year. The recovery was slowed by the arrival of another devastating hurricane in 1786 (Edwards 1819: 347; Roper 1928: 446-458; Schabaschko 1958: 68-69).

In 1783, a trade covenant between the United States and the British Caribbean under restricted conditions. American traders were only allowed to export leather, livestock, grain, flour, and iron in exchange for British-Caribbean goods. However, ships from the United States were excluded from the trade and all products had to be shipped in British bottoms (Carrington 1988: 164; Edwards 1819: 449-450; Roper 1948). In retaliation, some American ports prohibited entry to British vessels, or imposed heavy duties on British and British colonial goods. In 1787, Jamaica exported about 380,000 gallons of rum to the United States, almost one third the amount exported to North America in 1776 (Edwards 1819: 346-349). In 1788, Barbados exported about 260,000 gallons to the United States, about one fifth the amount exported 1758 (Edwards 1819: 348). The less dramatic drop in Jamaica may show the Americans greater appreciation for concentrated Jamaican rum. The new triangle trade route from Britain to North America, to the British Caribbean, and back to Britain, only served to further strengthen Jamaica rum making and weaken Barbados rum making. In 1794, Americans temporarily banned all trade with the British Caribbean in retaliation against British sea captains capturing American privateers. The economic crisis trade extended the damage to British Caribbean rum making caused by the American Revolution. A planter in St. Vincent complained that British Caribbean rum makers were negotiating prices with the French.

We are compelled by the events of war and the request of governments to exchange situations with the French for those materials which they formerly used to make soap, or to feed to an ever-growing stock: they were manufacturing soap and disposing of it more profitably at a price of 25 francs 20 centimes per gallon while the British suffered, as a consequence of the development in Britain, what will be competitive decisions: his difficulty and to dispose of his raw material to the French did formerly

(Crosby-Caribbean 1933: 179)

Yet, despite these obstacles, fairly substantial amounts of British-Caribbean trade continued to flow into the United States. Parliament opposed the export of bananas and the Bahamas to U.S. shipping. British-Caribbean governments frequently petitioned power to allow American vessels to sail in and trade in British-Caribbean ports for emergency purposes (Knox 1948; Ragatz 1927:181). French, Spanish, Danish, and Dutch ports provided links for the indirect trade between the United States and the British Caribbean.

In the late eighteenth century, raw markets in Britain and Ireland also subsided. Although there were sharp increases in foreign imports, Jamaica raw markets greatly benefited from their control of British and Irish markets. In 1784, Britain exported more than 4 million gallons of rum, mostly from Jamaica (Edwards 1819:4). By 1797 (1807: 3287), British Caribbean cotton in London also tried to meet the demand for rum in America orders to reduce British Caribbean dependence on American raw markets. According to Sir William Young, an advocate of British-Caribbean trade, the stability of British-Caribbean raw markets a larger share of the British stock market was largely due to its "demand." Young believed that increasing raw contracts with the British military would remedy the situation.

If, in national policy, as well as in private economic and mercantile interests, the British Government would exclusively purchase rum for the supply of the soldiers and sailors (other than locally), then, with the better understanding now of its commerce than the King's nation would spend in every village and house the largest of rum in Great Britain would proportionally and greatly increase: the enormous export of British produce and manufactures to the West Indies would in a great measure supersede the discussion of commercial interests between America and the islands, and stop put a stop to the national disputes arising as consequences: and in every view of national interest, the mother-country would be amply repaid by the protection and preference given to the sale of the article of colonial produce.

(Young 1807: 64-65)

Competition in the U.S. market from foreign rum makers reduced the profitability of Barbadian rum making (Dickenson 1946:153). During the Revolution, rum making expanded in Cuba, Saint Domingue, and the Spanish Yucatan Islands and rum from these islands penetrated the U.S. market. In addition, rum making created in the developing Caribbe Islands, which, because they desperately needed provisions and plantation supplies from the United States, could easily justify its infiltration into the rum trade as the entrance of American ships to help meet emergency needs.

Although U.S. rum imports returned to pre-Revolutionary levels by 1808, Barbadian rum made up a much smaller slice of the pie. Between 1785 and 1793, Barbadian exports averaged less than half a million gallons of rum per year, much of it to British Canada (Jennings 1984:356; Young 1857:38-40). Moreover, Barbadian rum also faced the rise of U.S. whiskey-drinking and growing U.S. colonizations, which expanded Caribbean rum, especially from the British colonies, with colonial dependence. Rum prices dropped considerably and Governor Pury (1776-1802) in Cayman 1788 (75) of *Isle de France* wrote: for want of wine, rum [...] is now a main Drug upon the heads of the planters. Rum production began from Turner's Hall and Codrington after the completion of these events (Figure 4-8). Moreover, a rum exportation rum making appears in the accounts of Turner's Hall and Codrington for the first time in the early nineteenth century and highlights the decline of the Barbadian rum industry.

## Conclusion

At the beginning of the nineteenth century, mercantilist policies shaped the growth of Caribbean rum. While officials in Spain and France sought to restrict the colonial rum trade, officials in Britain saw rum as a potential ally in their war against foreign exports. The Seven Years' War was a turning point for French and Spanish Caribbean rum makers. The war spread knowledge about advanced distilling techniques and the free trade reforms that followed the conflict helped reform rum trade on transatlantic levels. British Caribbean rum, on the other hand, found a colonialist home market and had Britain's growing demand for

abstained during its industrial revolution. British/Caribbean rum replaced many foreign alcohol imports and generated considerable profits. As a result, British Caribbean rum makers achieved much more significant commercial gains and more revenues helped stabilize sugar estates.

Despite the setbacks of war, huge amounts of rum continued to flow across the Atlantic. Between 1798 and 1808, the United States, Britain, Ireland, and Canada imported an annual average of more than 5 million gallons of Caribbean rum (Young 1827: 30). Jamaica emerged as the largest supplier, but it was beginning to face competition from French and Spanish Caribbean rum makers. Barbados lost its former colonies of Grenada, Saint Vincent, and Dominica, who made substantial gains in the Atlantic rum market.

In the nineteenth and twentieth centuries, rum making took on increasing economic importance. The abolition of the direct trade, the consequences of Caribbean slavery, and falling sugar prices reduced the profitability of sugar making. In order to survive these challenges, Caribbean sugar planters abandoned some of their sugar cane fields to their till lands and the produced huge amounts of rum for foreign markets. These crises reinforced the role of French and Spanish Caribbean rum makers, who eventually dominated the Atlantic rum trade.

## CHAPTER 7 RISK AND ECONOMIC SURVIVAL IN THE NINETEENTH AND TWENTIETH CENTURIES

In the nineteenth century, transportation became increasingly important Caribbean sugar planters. Competition from newcomers to the world's sugar markets and damage to European trade and heavily industrialized yarn making in cotton ships. The set of free trade economies in the Atlantic world included the emergence of French and Spanish Caribbean cane making, which by the end of the nineteenth century, surpassed their British Caribbean trade. The growing number of working class consumers opened demand for cane in Europe, Africa and North America. Europeanization and Americanization changed cane making from an urban industry, by the early twentieth century, metropolitan governments were sufficiently dependent upon Caribbean manufacturing to maintain protectionist quotas that brought greater security in cane markets. Two world wars and the Cold War further opened Caribbean cane making and directed the flow of the cane trade. In the beginning of the twenty-first century, cane is one of the world's most widely consumed grains and cane making continues to be an important part of the Caribbean economy.

Risk cane making also faced serious challenges. The nineteenth century began as a turbulent and uncertain time for Caribbean cane makers, especially in the older British Caribbean colonies. The emergence of new sugar and cane making industries in the Caribbean and Far East, the growth of North American industry dealing with the development of European sugar beet industries threatened the economic stability of the Caribbean. The abolition of the Atlantic slave trade and the emancipation of Caribbean slaves led to increasing labor costs and a general decline in production in much of the region. New sugar making technology decreased the profitability of cane for the Caribbean.

The spread of temperance philosophy reduced alcoholism throughout much of the western world and, in the early twentieth century, global conflict and state-sanctioned prohibitionism against alcohol temporarily closed liquor markets in Confucian Asia.

#### **The Nineteenth-Century Expansion of Rum Making**

The high alcohol content of sugar cane makes it an ideal source of alcohol. As a result, rum-making has emerged in nearly every region of the world where sugar cane flourishes. In the late eighteenth and early nineteenth centuries, sugar production spread to India, Africa, and the Pacific, and rum-making soon followed. Small-scale distilleries and dwelling operations also developed.

In the eighteenth century, rum-making began at the Indian Ocean colonies of Madagascar, the Seychelles, and the Mascarene islands, especially Mauritius and Réunion. There were at first small industries catering to local alcohol demands, but in the nineteenth century, these regions exported substantial amounts of rum to India, Australia, and East Africa (Parrin-Jacques 1997: 160–165). In the mid-eighteenth century, Dutch and Chinese sugar planters produced rum, called *arrack*, in Jakarta, the largest city in Indonesia. The same *arrack* was originally used for alcohol made from rice (anthracene palm), but it was eventually applied to spirits made from sugar cane juice and molasses (Pikaminato 1980).

In the mid-eighteenth century, sugar cane based *arrack* was also produced in colonial India, on the Dutch-controlled island of Ceylon and in the Portuguese settlements of Goa and Camagosto on the western coast. Willem Pikaminato, a Japanese trained sugar planter, established a sugar factory in Bengal and, in 1790, wrote a treatise on the manufacture of sugar and rum for the British East India Company. The treatise was meant to encourage Japanese rum-making techniques in India, but Pikaminato (1790: 29–40) also described the uniquely Indian production of flavored rum made by adding the juice of oil plants of passion, pineapples, mangoes, coconuts, and oranges to the fermenting mixture. Pikaminato was in advance of East Indian rum-making, but believed (1790: 50) that Indian rum would have difficulty finding a good market because of its “heaviest taste.”

Apparently, East Indians were not sweetpotato makers. Thorneycroft argued that the poor quality of East Indian rice was due to the “bad treatment of materials, neglect of the purity of the seedling stock, and the great proportion of fermentable and putrid wastes supplied to fermenting the jaggery [molasses] from one place to the other.”

Rice-making emerged in other parts of the Pacific. Sugar cane spread out of the South Pacific 6,000 years ago and, introduced as an alcoholic beverage to the ships of Captain Cook and other European explorers, Spanish colonists in the Philippines, Guam, and the Marianas may have introduced the particular use of drinking sugar cane juice as early as the seventeenth century (Marshall and Marshall 1973:644). At the time of Cook's exploration in the 1770s and 80s, Hawaiian islanders used sugarcane only as a “vegetable plant” (Ellis 1912B: 116). By the early nineteenth century, however, American firms had built sugar plantations in Hawaii that were large-scale sugar cane, plantation-based operations. Introduced many Pacific islanders, especially Hawaiians, to new work systems that disrupted traditional social structures. The massive amounts of cane and other European introduced alcoholic beverages created new social problems, including alcoholism, which, as in Cook Island society, hastened the demise of traditional Hawaiian culture (Lansell 1964). Signs of what was to come may have been evident on the Cook voyage in the 1770s when the crew's surgeon, William Ellis (1782: 127), reported that Pacific islanders, once introduced to European goods, “aggravately anticipate the purchase of new beverages.” In 1821, Hawaiian Governor Boki used a sugar factory to a symbolized company that abandoned sugar making for non-fermentation. According to sugar historian Noel Deon (1961: 255), Christmas missionaries objected to the industry and persuaded King Kamehameha to have the plantations destroyed. In the 1830s, the French Pacific colonies of Tahiti and New Caledonia also produced raw sugar for export (about 20,000 gallons a year in Tahiti) (Korvetgas 1964: 481).

British settlement of Australia began in 1788 and imported raw cane immediately became an item of trade with the Australian Aborigines. According to anthropologist Marcus Langton

(1753) giving the Aborigines much can helped the British settlers mark the differences they experienced and “inculcated” the Aborigines into British colonial agendas. By making the Aborigines dependent on rum, it became a tool of British colonial domination. As in the Caribbean and North America, British colonisers undermined the development of native peoples and used domesticating images to justify British rule and forge an ideology of white supremacy.

Rum was used extensively by the British military and colonial rulers in Australia. During the early years of settlement, rum often supplemented military and soldier-wages and per capita consumption rates sometimes reached more than 7 gallons per year (Crowley 1974: 44). In 1800 the surgeon-Governor William Bligh, who had achieved fame as the captain of the military vessel, *Porpoise*, took over command of the Australian colony. As governor of Australia, Bligh immediately placed heavy restrictions on alcohol importation, attempted to ban the use of rum as a wage incentive and article of barter. He outlawed local alcohol production, alcohol rum shops, and self-distilling equipment. The following year, Bligh was deposed in a non-violent overthrow of his authority. This overthrow, known as the “rum rebellion,” was caused by Bligh’s tyrannical leadership, which included tight restrictions on rum trafficking within the colony. In the mid nineteenth century, sugar production emerged in Australia and rum-making soon followed. By the late 1800s, there were 13 distilleries operating in Queensland and, in 1890, nearly 100,000 gallons of rum were produced, mostly for local consumption (Crowley 1974: 444).

In the early eighteenth century, leaders for the Royal African Company proposed the construction of a rum-making sugar plantation on West Africa to help feed the slave trade. However, the plan was never implemented and little rum was ever produced on the region. Alcohol import restrictions were as important to colonial governments in West Africa that officials generally restricted local alcohol production (Akpanpong 1997, Pitt 1994). Rum-making’s rum-making failed to take hold in West Africa, as it failed in other parts of the continent. In the late eighteenth century, sugar-rum-based alcohol was produced in the



European colony of Madagascar (Chapman & Conley 1783: 76-7). In the late nineteenth century, South Africa emerged as a major producer.

Cogeneration is the detailed space extension and the growing global demand for alcohol spurred technological advances in steam-making. In 1884, Edward Adams introduced the first continuous still which worked on the principle that, by closely regulating the temperature of the wash as a series of retorts, water and alcohol could be condensed separately producing a concentrated spirit in a single distillation. In 1893, the introduction of the Collier-Blenheim continuous still improved the continuous still design by making a more efficient spirit. The great advantage of the continuous still was that it used much less fuel (usually coal). Early pot stills required fuel the weight of nearly three times that of the spirit it produced, but the Collier-Blenheim continuous still needed only one quarter the weight of the alcohol it produced (Lock 1888: 366-367; Underwood 1923:35-6). Fuel cost was always an important consideration for planters in the Caribbean sugar colonies, which usually lacked sufficient fuel resources. Other design patents for continuous stills soon followed and, by the second decade of the nineteenth century, there were numerous types of wash-up on the same basic principle. Although a number of steam heated stills were patented in the early nineteenth century, the introduction of the Colley steam-heated still in the 1830s was a major advance in distilling. According to industrial historian A.P.V. Underwood (1923: 58), steam-heating was advantageous because of "more rapid heating, reduced wear and tear of still bodies, maintenance of a degree of uniformity of the flow of the spirit through the column of vapour water."

While continuous stills were popular in Europe, colonial Caribbean distilling practices, particularly in the older Caribbean islands, remained technology-ally conservative. In 1848, James and Andrew sugar planters Leonard Wemy (1848: 124-127, 404-405) informed that the sugar colonies were not well suited for continuous type stills. According to Wemy,

*Rolls of Warranted, Longers, and Cutters, though very excellent, and in their very efficient use, notwithstanding, much better adapted to European difficulties than the sugar-rolls. I have seen many of them, as well as modifications of them working on estates in Jamaica and the West-Indies, but I never knew them so efficient modifications as their government, probably from not having such careful and digital workmen to attend them with an aim obtainable in Europe.*

(Wray 1048-807)

Many Caribbean colonisation reported the new technology and, initially, relied on the common pot mill, which, although increasing in capacity in the eighteenth century, had been the basic distilling apparatus used in the Caribbean since the beginning of European colonisation. Some distillers, especially in the new rum-making colonies of the Caribbean, modified their traditional pot mills by attaching the more fuel-efficient continuous French still heads. These modified common mills were widely used in India and the East Indies. In the Caribbean, they were particularly associated with the emerging sugar- and rum-making colony of Dominica (British Guiana). Dutch-owned Dominica roughly adopted large common pot mills to the more fuel-efficient French mill, head invented by Cury and improved by Blouin and Boon. Jamaican distillers were more resistant to change. According to Wray

*From what I have already said it will be seen that I possessed a very good opinion of the [prevailing common mill], and consider them well adapted to the requirements of a sugar estate. But of all the different arrangements, I have never known any to surpass the common still and double retorts. As a distilling apparatus particularly suited by its simplicity, durability, economy, and efficiency to the wants of the planter, I consider that it much interested.*

(Wray 1048-807-808)

In Jamaica, in 1888, sugar technologist, Edward Lock (1858-1979) also reported, “nothing is likely to supersede the common still and double retorts” and, in late or 1944, the central factory at Freetown which produced over 450,000-gallons of rum from its five “pot mills” (C.G. 1944 25b). According to Lock, although common pot mills required a considerable expenditure of fuel, they produced an especially “fine” spirit. In fact, traditional pot mills continued to operate in parts of the Caribbean today, including the River Antoine rum distillery in Grenada.

During the early nineteenth century, other changes took place in rum-making. Processed streams of yeast were introduced to help ensure proper and complete

formulations. Once again, historical scholars provided contrasting views. Wray argued (1944-45) that cane juice (stem and molasses) caused the ferment, placing the introduction of yeast unnecessary. Glucose was fermenting agent is also discussed by Lock, but he is not clear whether glucose is actually efficient or if fermentation is done entirely by the action of yeast, which are naturally present on the sugar cane. Wray (1944-45) argued vehemently against entanglement of stems of yeast, which he inferred completely altered the character and taste of fermented cane. As late as 1997, the Director of Public Gardens and Pesticides in Jamaica emphasized that 40% of success in cane molasses was lost due to the phloem's resistance to cell-commercial yeast strains (C.D. 1997-463). **British Caribbean Rum and the Nineteenth Century**

At the beginning of the nineteenth century, sugar making was still the dominant economic activity in the British Caribbean. The Haitian Revolution had destroyed the world's leading sugar producer and opened new markets to British Caribbean sugar. War between Britain and France (1811-18) helped enlarge provide British Caribbean sugar producers. In addition, new sugar cane growing regions emerged in the British Caribbean, which began to challenge the dominant position of Jamaica in the British sugar and rum markets (Table 7.1).

**Table 7.1. Annual average sugar and rum exports to Britain in the 1820s**

Colon	Tons of sugar	Gallons of rum	Value, £/cwt
Antigua	1,503,179	605,112	0.179
Bahamas	2,568,769	127,996	0.009
Belize	703,848	99,505	1.158
Barbados	6,278,757	12,856,823	1.923
Guatemala	452,481	179,764	0.397
Grenada	3,358,473	3,955,180	1.158
Jamaica	12,992,456	29,564,540	2.137
Montserrat	156,383	212,119	1.053
Nevis	482,699	2,967.8	8.444
St. Kitts	1,479,006	991,095	0.672
St. Lucia	748,884	1,867.3	0.148
St. Vincent	2,561,698	1,736,940	0.677
Tobago	1,687,477	2,447,789	1.449
Trinidad	196,715	99,644	0.697
Total	2,008,128	263,128	0.673

Source: Rogers 1927: 11

However, British Caribbean sugar making soon faced serious challenges. historian Lowell Ragatz (1928:37) argued that, by the late eighteenth century, the profitability of British Caribbean sugar was on the decline. A key element of Ragatz's argument was that soil exhaustion had reduced the productivity of sugar estates, especially in older islands like Barbados. In fact, as early as 1663 Governor Willoughby of Barbados (cited in Williams 1994:111) complained that soil productivity was "decaying fast." By the early nineteenth century, competition from sugar producers in new and fertile cane-growing regions, such as Mauritius and Louisiana, threatened to glut sugar markets. Moreover, the poor management of foreign plantation managers in the British Caribbean contributed to the decline. According to Ragatz, the British Caribbean sugar planters "insistence on one crop and their unwillingness to improve production methods using new technology were symptoms of their decline." Eric Williams (1994) corroborated Ragatz's decline thesis, proving that the increasing profitability of British Caribbean sugar estates led to the British abolition of the slave trade in 1807 and the eventual emancipation of British Caribbean slaves in 1834.

More recent analyses of the profitability of British Caribbean sugar estates has challenged many parts of the decline thesis. For example, J. B. Ward (1986:399-40-41) showed that British Caribbean sugar plantations were profitable throughout the slavery period and that decline theories were "pernicious." Ward revealed that profits from British Caribbean sugar plantations hovered around 10% in the first two decades of the nineteenth century and about 7% for the last years of slavery. Seymour Drescher (1977) argued that the abolition of the slave trade hastened the decline of British Caribbean sugar, not the other way around. According to Drescher, abolition and emancipation decreased the availability of a steady and stable labor force, which resulted in increased labor costs. Insufficient funds particularly badly due to the large amounts of credit lost for the development of a proximity (Mintz 1974). After emancipation, the rate of Jamaican sugar production declined sharply and, by the 1840s, exports had dropped by two-thirds. According to historian

Bartholomew (1961: 113): production went in Jamaica nearly tripled after emancipation. Similar increases in production were reported in much of the British Caribbean. In an effort to maintain labor supplies, the British Parliament encouraged the migration of indentured Asian workers, mainly from India and China, to the sugar plantations of the British Caribbean.

The only real exception to the decline was on some of the older sugar islands like Barbados, St. Kitts, and Antigua. These colonies had a limited amount of available land for the use of sugarcane. Sugar production in Barbados actually increased for several years after emancipation (Curtis 1984: 17). By the mid-nineteenth century, although the major sugar refiners of Trinidad and Guyana managed to expand output, free-trade and growing competition from new sugar-producing areas accelerated the decline of sugar's profitability.

In the early nineteenth century, the perennial income market for British Caribbean sugar was under attack. In 1825, the import duty on sugar from the British Indian Ocean colony of Mauritius was lowered and eventually made equal to that of British Caribbean sugar. In 1833, Indian sugar was also subjected to the equal market conditions. While British Caribbean planters may have felt uncomfortable from the equal status accorded to British colonial sugar producers in the west, the admission of foreign sugar was a more serious threat. In 1854, foreign sugar produced in new slaveholding colonies was admitted into the British market. In 1846, Parliament passed the Sugar Duty Act, which began the process of admitting all foreign sugar on an equal basis. This process was completed in 1854. In an effort to protect British sugar refiners, the act equalized duties only on granulated, but, by 1854, all sugars freely entered Britain (Curtis 1984: 18). In Jamaica, Christian missionary John Ryrie wrote,

The abolition of slavery they were, certainly, a great evil to be removed beyond the power of successful competition with ourselves where slavery was tolerated. It became impossible as they claimed for a business plan that with free labor to raise anything like the prices at which it was sold by the planters of Cuba, Brazil, and Porto Rico.

(Ryrie 1850: 71)

Moreover, the greatest challenge to Caribbean sugar producers in the nineteenth century was the growth of beet sugar refineries in Europe. Germany, Austria, and France became major beet sugar producers, in part, to decrease their reliance on foreign imports of colonial Caribbean cane sugar.<sup>1</sup> Sugar beet refineries in Europe, especially in France, were protected and received government subsidies. Until the mid-nineteenth century, sugar cane was the base for world sugar. By 1850, 70% of world sugar production came from sugar beet and, in 1876, that figure had jumped to 50%. “From being a net importer of sugar, Europe became an exporter” (Ferguson 1996:103). The Sugar Duty Act of 1846 allowed beet sugar to freely enter the British market. The British market was soon saturated and the United States and Canada became the only significant markets for Caribbean cane sugar.

Parliament attempted to compensate British Caribbean sugar producers for the loss of their protected home market. The use of sugar as British diplomacy, which was previously mentioned, was presented (Derry 1894:19-20). Before this time, the limited entrance to Britain had proved so strong that the admission of sugar into British territories had only been allowed for emergency purposes, such as in the period 1799-1813 when war with France and poor harvests led to severe grain shortages (Ruggie 1928:206-207, 249-248).

British content was also lowered. In the early nineteenth century, Parliament imposed a series of taxes on certain raw materials necessary for the war against France. The customs and excise payable on raw commodities Britain took from its 2nd port gallon in 1803 to 10s third port gallon in 1805. In Ireland, customs and excise duties jumped from 4s.10 third to 5s third port gallon (Ruggie 1928:209). Although forced to help pay for the war effort, the oppressive duties were only slightly reduced after the conflict. In 1805, Parliament sought to help the British Caribbean sugar planter, and probably compensate them for the equalization of import duties on sugar from Mauritius, by lowering the duties on cane. The plan lowered duties to 5s 6d – but the duty on gas – which had been increased in the eighteenth century in order to curb drunkenness and temper the Caribbean sugar

refiners, was also reduced and made equal to that of cane. According to one frustrated planter, the reduction of the gas duty was counter-productive because 'you had more "more" sugar than in the records of the lowest than in this country than all other nations combined."

However, economic conditions, rather than the fear of moral decay, fuelled the debate

by these references to duty-on natural gas. The planter is placed at the situation of a general complaining to duty on the pressure of a much superior money unit, who now values his cane at 10-100 more, at the very moment the sugar was maintained with 12-200, for they are comparatively worn off with the reduction of 1s. 6d. than they were with the duty of 11s. 3d.

(Chapman 1820 85)

The loss of the western British sugar market led to the further reduction of cane duties 'to put the colonial distiller, it was said, on par with the home distiller' (Davy 1824 19-20).

Paradoxically, whether it succeeded or not, was pushing the British Caribbean toward cane production. Export statistics from the mid-nineteenth century reveal that many sugar planters, in order to surmount the economic damage caused by the loss of their potential home market for sugar, adopted production strategies that emphasized raw-caneing.

In Jamaica, sugar production declined sharply after emancipation and many planters resorted to raw-caneing, especially in the western region of the colony (Barrow 1857 44). As early as the mid-eighteenth century, concentrated Jamaican cane had achieved a good reputation and sold well on the British market. Jamaica was the leading supplier of cane to Britain. While exports of Jamaican cane declined from 7.4 million gallons in 1820 to 1.5 million gallons a decade later, cane exports, unlike sugar, quickly rebounded and increased steadily until the end of WWI (all British imperial gallons have been converted to U.S. gallons of 128 fl. oz.). Sugar planters simply varied the amount of cane sent on the plantation to produce more raw than sugar. Jamaican cane supply and Britain's W.I. Caribbean rivals,

The position of cane depends to a great extent on that of sugar, though for many generations there of late have been made experiments in large fields of cane that was formerly the cane. Trials can be pointed out, as for example, 1795, 1802, 1812, and 1816, and more late ones, when only raw cane was exported for many years large fields of sugar but as a fair general statement, an average of two-parkings for three large fields may be taken. Since 1834 the average is seven to two.

(Barrow 1875 333)

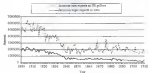


Figure 7.1 Jamaican rum and sugar exports (Jamaica 1800–1810 from Kaye (1827:25), 1811–1817 from Fraser (1961:240–245), 1818–1900 from C. D.)

Jamaicans measured the ratio of rum to sugar exports throughout the nineteenth century in order to survive falling sugar prices and locally from the import-duties debate (Figure 7.1). One of the great advantages of rum was that, unlike sugar, it could be stored for many years and sold when prices were high. Price determined the proportion of rum exported: the relationship between price and export was highly linear. During the 1820s when a gallon of rum averaged 50% of the price of a cwt. of sugar, the export ratio was 2.7 gallons of rum per cwt. of sugar. In the 1850s, when the price of a gallon of rum averaged 16% of the price of a cwt. of sugar, the export ratio jumped to 5.3 gallons of rum per cwt. of sugar (Fraser 1961:240–241). Sharp increases in rum exports at particular prices corresponded to high rum prices. In 1808, the price of a gallon of rum was 12% the price of a cwt. of sugar and the export ratio was 5.3 gallons of rum per cwt. of sugar. In 1836, the price of a gallon of rum was 16% the price of a cwt. of sugar and the export ratio was 7.3 gallons of rum per cwt. of sugar. In 1908, a rum price equal to 31% that of sugar produced an equivalent of 12.3 gallons per cwt. Another 1913, when the value of rum reached its peak relative to sugar and a gallon of rum represented 12% the price of a cwt. of sugar, the rum to sugar export ratio was 11.7 gallons per cwt. The relationship between rum exports



and price rises meant that Jamaican sugar planters were slow to adapt quickly to changing price ratios. When sugar prices were low they distastefully seemed to have distasteful rather than their sugar conditions. They multiplied rum and, when rum prices were high, released rum bails on the British market. They were practical business managers who did not simply wait for a return to the glory days of sugar making.

In the first three decades of the nineteenth century, the value of rum represented 34–17% of Jamaican exports (Bogues 1976: 211). Rum revenues remained high throughout the nineteenth century. In 1875–1887, rum represented an average of 18% of the value of Jamaican exports. In 1887, Jamaican rum exports were worth 20% of the island's total export and rum brought in more than sugar. By the early twentieth century, Jamaicans had a more diversified economy and the increasing export of fruit, cocoa, and pineapples – as well as coffee – which had been a valuable export commodity since the eighteenth century, reduced the relative value of rum. Between 1901 and 1912, rum represented an average of only about 7% of Jamaica's total export trade. Yet, despite the relative decline in rum revenues, the value of rum exports usually exceeded the value of sugar exports.

In the early nineteenth century, Trinidad, Demerara, Barbados, Tobago, and the Ceded Islands became strong competitors in the British rum market (Table 7.1). By 1803 Demerara was exporting over one million gallons of rum annually to Britain making it the second largest exporter of rum (Bogues 1927: 18). A decade later, Demerara rum captured more than 20% of the British rum market (Kleinquist 294–436; Bogues 1927: 88). In 1799, Trinidad exported 170,871 gallons of rum and, by 1815, exports reached more than 500,000 gallons (Foster 1936: 211–212). Between 1827 and 1829, rum makers in St Vincent produced an annual average of 765,308 gallons. In these three years, the small island of Roatan, in the St Vincent Grenadines, produced an annual average of 18,546 gallons. Even tiny Maricao managed to produce an average of 2,877 gallons per year. St Vincent's sugar planter Charles Shephard (1854) recorded the island's rum production and highlighted the variability of rum in sugar ratios in different estates. Between 1827 and

1825, while a few sugar plantations produced no rum, others, like the ruled plantation in St. George's parish, produced an enormous 8.3 gallons of rum per cent. of sugar.<sup>1</sup> In 1825, nearly every sugar plantation produced some rum and the average rate for all rum-making plantations in St. Vincent was 2.7 gallons of rum per cent. of sugar.<sup>2</sup>

In contrast to the success of rum-making in Jamaica, Guyana, and some of the newer sugar colonies, many British Caribbean rum makers, especially in the older British Caribbean colonies, suffered. British Caribbean rum began the nineteenth century largely excluded from the profitable U.S. market. The American Revolution, and the subsequent Navigation Acts which followed in 1793, greatly restricted the level of trade between the United States and the British Caribbean. Many British Caribbean sugar planters lost an outlet for their rum and immediately turned to plantation supplies. Although British Canada provided some relief, it could not supply enough plantation provisions or purchase enough rum. According to historian Selwyn Carrington (1966), trade restrictions had coloured "Caribbean governments' implementation policy of 'emergency relief provisions,'" which temporarily lifted trade restrictions with the United States and helped to establish some sense of trade equality. Rum was among the products selected in the emergency trade.

But British Caribbean rum also had to contend with the rise of U.S. nationalism. After the Revolution, Americans sought self-sufficiency and rejected British Caribbean rum and reliance with colonial dependence. According to scholar historian William Renshaw (1976-77), in the eyes of the British Caribbean "was foolish and wasteful because it was harmful to American domestic and their workers." Increasing economic change western grain provided Americans with cheap American whiskey. The shift to whiskey drinking occurred in 1790 when the United States banned British imports in retaliation against the British policy of impressing American seamen into the British navy. In 1793 with strong support from the rum-making New England states, the U.S. Congress approved a nation tax on domestic whiskey. However, officials had difficulty collecting the tax and faced widespread protest from western grain farmers. In 1796 demand from Pennsylvania

British importation reduced potatoes known as the “Whiskey Potatoes.” In 1832, Congress repealed the Whiskey tax, which lowered the cost of whiskey. Imported rum and molasses still paid high import taxes. Whiskey production also increased considerably after 1815 when protectionist Europe closed European markets to American processed grain and a surplus of grain for distillation (Rombough, 1979-80). The high cost of plantation goods, coupled with the American’s increasing consumption of whiskey, gradually reduced the significance of British Caribbean rum in the U.S. market. In 1764-1771, according to American sugar planter Edward Long (1774:8-99), Jamaica annually exported an average of 200,000 gallons of rum to North America, primarily the distant continental colonies. In 1774, American sugar planter Bryan Edwards (1819: 364) estimated that Jamaica exported nearly 1 million gallons to the same destinations. Yet, in 1785, exports to the United States dropped to about 70,000 gallons and, in 1802-1811, Jamaica exported an annual average of only 15,000 gallons to the United States (Gardner 1873: 124).

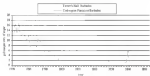


Figure 7-3. Rum production in Cuba and Turner's Hall estate in Barbados (Source: WFP 1896)

The American Revolution dominated Barbadian rum-making, which served substituted to a vital eighteenth century drink. The trade restrictions that followed the American Revolution and the growth of American whiskey-drinking reduced the largest

market for Barbadian rum. Production accounts from Colebatch and Turner's 1861 glossaries in Barbados show that the decline lasted well into the nineteenth century (Figure 7-2). In fact, as the early nineteenth century, even smaller sugar estates, like Mounts and Harve, frequently exported more rum than Barbados. In the early 1800s Britain usually imported less than one thousand gallons of Barbados rum per year (although trade between the United States and Barbados resumed after the American drinking ban) was on the decline after the 1800s (Riddough 1979).

Table 7-2. British Caribbean rum exports to Britain in gallons

Country	1776	1826	1876
Antigua	114,323	64,947	21,357
Barbados	196,479	2,004	3628
Demerara	—	827,484	1,000,000
Grenada	74,923	7,887	694.3
Jamaica	2,753,079	2,286,754	1,703,689
Guadeloupe	600,000	179,842	82,779
St. Kitts	151,334	73,879	17,087
St. Vincent	88,486	35,713	16,128
Trinidad	—	17,323	16,187

[Source: 1776: 1836 Register 1927; 1876: Riddough 1946:24; Demerara: 1876: Riddough 1946:476; Jamaica 1876: Turner 1964: 268-269]

The decay of the Barbadian rum industry is most evident in the rate of molasses exports, the basic ingredient in rum making. In the eighteenth century, Barbados exported almost an million gal, and the nineteenth century, Colebatch and Turner's 1861 states, rarely measured molasses sales. However, between 1844 and 1845, Barbados exported almost no rum. In a large amount of molasses was loaded onto U.S. ships and carried back to lower distilleries (Riddough 1844: 140-141). In those five years, Barbados molasses exports were worth £145,724 while rum exports were a mere £868, one half of one percent the value of molasses. In 1845 the value of public exports were no more greater than exports of rum. In the late nineteenth century, when rum exports increased throughout most of the British Caribbean, Barbadian rum continued to struggle. In 1866, Barbados exported 41,000 gallons; a decade later only 20,000 gallons, and in 1876, less than 3,000 gallons (Riddough 1946:34,874). During the height of the British

Caribbean rum trade in the 1790s. Barbados produced an annual average of about 500 000 gallons of rum, but all of it was consumed locally (Pernick 1905: 14).

Emancipation and the loss of a protected home market for sugar depressed the overall levels of British Caribbean rum production. Britain's efforts to balance British Caribbean sugar plantations through the reduction of rum duties helped subsidise rum exports on the mid nineteenth century. Yet, despite favourable policy toward rum, nineteenth century exports stagnated and British Caribbean rum estates that had once produced large amounts of rum struggled to remain solvent. The trend occurred in many parts of the British Caribbean. For example, rum making at Tobago intensified at the end of the eighteenth century and, by 1828–1830, Tobago exported an average of more than 500 000 gallons of rum per year. In the early nineteenth century Tobago became a major rum making colony. Other contemporaneous Tobago rum exports, like those of Jamaica, immediately fell and then stabilised (Figure 7.1).

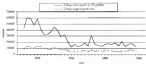


Figure 7.1 Sugar and rum exports from Tobago (source: Woodcock 1942 appendix)

While rum exports to most of the British Caribbean stagnated, Denmark and Jamaica emerged as major rum-making colonies. In 1870, the International Exhibition in Philadelphia celebrated the high quality of Jamaican rum. Because of its distinctive taste, Jamaican rum was widely sought after in Germany, where it was used to adulterate spirits

made from Chinese best sugar (Bunchey 1957: 76). In the late nineteenth-century, rum imports from Denmark challenged the dominant position of Jamaica. In 1858, Britain imported about 5.4 million gallons of rum, 40% of which came from Denmark. Jamaica and the other British Caribbean colonies provided another 40%, while rum from Mauritius and the Spanish Caribbean represented the remaining 20% (Kervynat 1946: 485). By the 1880s, Denmark actually imported an average of more than 4.2 million gallons of rum – a third more than Jamaica. Unlike Jamaican rum, Denmark's lower quality product was made from pot still quality viscous (yet not lower in alcohol per cent) (Bunchey 1957: 76–77). What made it appealing was that it was cheap and imported in bulk. The British Indian Government of Mauritius also sought to compete rum colony supplying rum makers in the other British Caribbean colonies. In the 1880s, Mauritius was for a time one of the world's main rum exporting an average of nearly 1 million gallons per year (Parnell 1988: 17).

Britain was the main market for French Caribbean rum, having almost imported much of its imports. In 1858, Britain imported about 5.4 million gallons of rum and re-exported about 2.1 million gallons. Australia, Germany, Italy, and Africa were the primary destinations. In 1900, the per capita consumption of rum in Britain was only about one sixth of a gallon (Kervynat 1946: 485). Bunchey (1957: 76) has already mentioned the most important aspects of British consumption.

### The Rise of French Caribbean Rum in the Nineteenth Century

In the late eighteenth-century, French island territories in French Caribbean rum imports and French Caribbean rum makers were confident that they could penetrate the large French-located market. In addition, the American Revolution legally opened a potentially large rum market. The increasing number of late eighteenth-century treaties on French-Caribbean rum trading highlight their growing optimism.

French-Caribbean planters, however, also faced various challenges. The nineteenth-century began with the loss of Saint Domingue – the largest sugar producing colony in the

Caribbean. Efforts to revive the Haitian sugar industry after the Revolution failed and sugar production declined dramatically. Moreover, war with Britain interrupted French colonial trade. After the French abolition of slavery in 1848, many former slaves rejected plantation work and became peasant farmers, especially in Guadeloupe, which had plenty of undeveloped and fertile land (Ransac 1886: 31). The loss of subsidized French sugar subsidies in France shocked French Caribbean sugar producers. Overall, the profitability of French Caribbean sugar-making fell and, like their British Caribbean counterparts, many French-Caribbean planters turned to rum making.

Early French Caribbean rum-making struggled. In the late eighteenth and early nineteenth-centuries, French-Caribbean rum had a poor reputation. In 1786, an anonymous writer in Saint Domingue (AA 1786) wrote that biggest problem facing French-Caribbean rum was that it was "impopulaire à l'étranger." Saint Domingue sugar planter J. F. Chapuisat-Corrigoy (1761 EE, 1803) also sought to explain the "disgraceable" taste of French-Caribbean rum. Chapuisat-Corrigoy like many other writers, blamed substandard distilling equipment and the ingredients used to brew. In the late eighteenth and early nineteenth centuries, French-Caribbean planters published detailed reports that advised how to create rum making technology and produce quality rum like that made in Jamaica (AA 1786; Chapuisat-Corrigoy 1783, 1803; Overton 1799: 204-210).

In 1803, Napoleon lifted the remaining restrictions on rum exports to bolster French Caribbean economies after years of war and economic instability, but, due to its poor reputation, not much changed for French Caribbean rum makers. During the first half of the nineteenth-century, Martinique and Guadeloupe produced about 250,000 gallons of rum per year, but exported very little. In 1815, for example, Martinique exported less than 100,000 gallons total, of that shipped to France. Most was probably consumed in the port towns of Marseille, Nantes, Le Havre, and Bordeaux, the main ports for French Caribbean products (Ransac 1886: 483). Some rum was re-exported to Africa, but the loss of Saint Domingue and French re-colonisation after 1803 to abolish the Atlantic slave trade meant a

business as slave trafficking and, therefore, a fall in French-Caribbean rum as a result is likely. North Americans also thought French-Caribbean merchants particularly bad sons and preferred to import French-Caribbean molasses for their own distilleries. The growth in whiskey drinking also induced the demand for rum as a mixer.

In 1820, the French government imposed an export tax of 10 francs per hectolitre on French-Caribbean rum, but tried to compensate for the tax by prohibiting the import of foreign rum (Sarrigaut 1996:482). In 1830, Martinique only exported 56,500 gallons of rum and, in 1834, Martinique sugar planter Pierre Desroches (1796-66) complained that his rum sold poorly and that "it would be difficult to find anyone paying 5 francs for 1 cask."<sup>10</sup> In 1836, Martinique had 34 distilleries; one-third the number that existed 40 years earlier (Schmidtmeyer 1977:116). In the mid-1830s, Martinique and Guadeloupe produced an average of about 600,000-800,000 gallons of rum per year, but almost all of it was consumed locally (Giffard 1996:60-61, Fox 1954:127-128, Schmidtmeyer 1977:103). In 1845, France raised the import duty to 70 francs per hectolitre and, in 1855, re-admitted imports of foreign rum, but at a very high tax of 200 francs per hectolitre. Rum remained a marginal commodity and, in 1840, Martinique only exported about 130,000 gallons (Sarrigaut 1996:482-483, Fox 1954:131-132, Sarrigaut 1996:484-485).

Although sugar production virtually vanished in Haiti, cane cultivation declined, and the decline of Haitian rum-making was a blow for local distilleries and consumers. In the 1820s, Charles Mackenzie (1808-1894, British Consul-General in Haiti) reported "The quantity of rum exported has always been small, and was confined to Christopher's ships. At present, all that is made is consumed in the country."<sup>11</sup> Mackenzie did not list rum among the major exports except at the port of Cape-Haïtien, where, between 1805 and 1820, exports averaged only 2,500 gallons per year (Mackenzie 1830:118-122). Rum exports were still weak in the mid-nineteenth century. In 1862, for example, Spanish consul-general in Haiti, Mariano Alvarez, reported

billings and wreackings are generally the result of excessive abuse of strong liquors, of which they consume also. Since the cessation of sugar-making, that of



young has increased, which they have attributed to war. The drink and other stimulants by foreign merchants have considerably increased the cost of medicines. But especially is owing due to the drought and the value of the American.

David Cagado was born in San Lorenzo de la Florida, Santo Domingo, D.R., and lives in Mexico, but is now 68.

Consequently, this report was written for the stated year that the world's known North American secondary oil field began operations. In the 1990s, there was one of the largest run producers in the Caribbean (Korvigan 1944-45). Parnell (1991: 14). (Sage technology M.J. A. Parnell estimated that Hudson produced an estimated average of more than 9 million gallons of run, *up to* and for the low-locked central sugar-cane based beverage industry. However, that a search in the public sector production was occurred locally.

In the next millennium-century, several events helped boost French Caribbean ties into the spotlight. Sugar plantations in Antioquia and Guadalupe identified their two devastating blights on the vineyards of France. In the 1850s, European vineyards found a species of fungus known as *Oidium Tuckeri*. The *Oidium*, which probably originated from the introduction of North American grape vines into Europe, severely damaged European vineyards. French wine production fell from an annual average of more than 1.1 billion gallons in the 1840s to only 290-million gallons in 1854. American grape vines were immune to attack by the *Oidium* and, as a result, many wine makers imported and cultivated American vines to save their operations. Although devastating, the *Oidium* crisis was largely averted in the early 1860s (Karrasian 1996, 26-28, 40). Since 1995 (2010-2016),

British cotton created its own serious downstream problem. The introduction of American cotton introduced an epidemic known as the *phylloxera*. In the 1850s, the aptly named *phylloxera* began developing vineyards throughout Europe. It hit especially hard in France. French wine production fell from about 3.2 billion gallons in 1875 to only about 0.8 billion gallons in 1895. The government of France offered 500,000 francs to anyone who could discover a cure for the *phylloxera*. In the 1890s, French viticulturists ultimately decided that the solution was to graft French vines with more resistant American vines.

The process continued well into the twentieth century, during which time French colonial coffee/Martique 1944: 24-28-403. Davis 1997: 203-204).

Table 7.3. Martique's export data and average export price (Millions)

Year	Sum	Average
1817	99,242	1,275.004
1828	56,334	889.610
1838	64,629	1,124.811
1848	121,294	200.284
1858	341,739	708.846
1859	264,694	1.508
1860	1,300,477	1,880.0
1870	1,664,718	75,472
1880	3,129,324	7,031
1894	4,856,476	15,413
1898	4,687,687	682
1908	1,364,475	1,779

Source: Davis 1908: 121.

The Orléans anti-phyllisore attacks were major turning points for French Caribbean rum makers (Table 7-3). In 1854, Napoleon III suspended the duty on French-Caribbean rum imports in order to replenish alcohol supplies lost to the Orléans. The move helped introduce rum to the French public on a wider scale. Between 1854 and 1877, France imported more than 1 million gallons of French colonial rum (Corvignat 1944: 24-403). Following the military incidents of alcohol smuggling, much of this rum was re-exported to French troops serving in the Crimea (Pardo de Lanza 1902: 119). In the mid-1860s, the Orléans crisis subsided and rum imports fell back to about 200,000 gallons per year as the availability of wine and brandy increased. The phyllisore, however, was much more damaging to French wine and brandy makers. In the 1870s, imports of French colonial rum rose to about 1 million gallons per year (as they had during the Orléans crisis) and, in the 1880s, rum imports jumped to more than 4 million gallons. In 1896, during the height of the phyllisore crisis, France imported more than 6.3 million gallons of spirits, most of which was French colonial rum. Martique provided the largest share, about 4.5 million gallons (Corvignat 1944: 403-433).

Signs of the increasing importance of French-Caribbean rum were evident in the increasing exports of molasses. In 1839, Martique exported 1,471,601 gallons of

mushrooms and only 89,822 gallons of rum. In 1854, only 15,423 gallons of mushrooms and 4,458,476 gallons of rum (Blissard 1984:62; Jones 1944:146). In the 1970s, Martinique exported an annual average of more than 4.5 million gallons of rum per year. Martinique has exports surpassed those of all other Caribbean colonies, including Dominica and Jamaica. Martinique exported another 100,000 gallons of rum per year making it one of the top rum producers in the Caribbean. According to exp. exports of raw mushrooms essentially ceased. French Caribbean rum exports, was not confined to Martinique. In the 1970s, Guadeloupe produced 1,583,000 gallons, more than half of which was consumed locally. The French Indian Ocean colony of Réunion also produced more than 626,000 gallons of rum per year and exported more than two-thirds of its produce. French Guiana contributed an additional 70,000 gallons per year (Korvelgan 1980:457; Pélissier 1983:13-14). In the 1980s, France was the main destination for French-colonial rum.

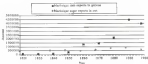


Figure 7-4. Rum and sugar exports from Martinique in the nineteenth century (source: Jones 1944:146-147).

By 1855, the rate of per capita alcohol consumption in Paris was 89 gallons of wine, 21 gallons of beer, and 3 gallons of spirits (Jones 1990:91). The decline in southern European vineyard landfalls a variety of other alcohol producers. Wine makers in Algeria, less severely hit by the phylloxera, helped fill the void in European wine markets. Beer and wine production in Europe also increased (Jones 1994:204). In the nineteenth century, alcoholic drinks from vineyard became especially popular among

the Parliament introduced beer taxes there. By the end of the century, alcohol was once again common and found its working class niche. In 1895, alcohol replaced beer and brandy as the second most popular drink in Paris (Husson 1996:58-59). The distribution of beer sugar molasses in France also helped meet alcohol demands. By the end nineteenth century, rum was added to the list of alcoholic beverages typically found at working class cafés in France (Husson 1996:55-57). In the 1890s, France was importing more than 5 million gallons of rum per year from Martinique, Guadeloupe, and Réunion. Due to the ravages of the phylloxera, most firms in Jamaica, Guernsey, and other British colonies occasionally contributed another 2 million gallons per year (Rauvignat 1946-48; Fauriol 1903:17). Some of it was re-exported to eastern Europe and Africa, but the majority remained in France (Husson de Lange 1997:122). At the end of the nineteenth century, France was importing as much rum, if not more, than Britain.

**Table 2.4. Annual average number of gallons of rum imported and consumed in the 1890s.**

Country	Production	Consumption
Spain	5,107,122	0
Martinique	3,326,358	4,318,748
Guernsey	4,364,134	4,324,911
Jamaica	1,454,928	2,758,135
U.S.	2,003,607	0
Guadeloupe	1,555,393	762,764
Morocco	1,158,975	854,121
Reunion	1,090,687	434,396
Barbados	554,822	0
Tanzania	487,113	142,720
St. Kitts	261,383	96,893
St. Lucia	284,636	68,211
Samoa	179,232	139,602
St. Vincent	58,308	0

Source: Fauriol 1903:13-14.

Revenues from rum helped stabilize the French Caribbean economy and helped them collapse after the drop in world sugar prices. Rum kept many sugar estates solvent. The Martinique capital of St. Pierre was known as the rum capital of the world and it was one of the wealthiest ports in the Caribbean. Between 1898 and 1902, average French rum exports were worth more than 25 million francs and rum represented more than 40% of the value of rum and sugar exports (Jans 1931:147-148).

In the early nineteenth century, French Caribbean rum-making is evidenced by only one inferior distilling technology (see) by the mid nineteenth century, French Caribbean rum makers were producing quality rum equal to that found in the British Caribbean. In 1800 Martinique rum did exceptionally well at international competitions, which helped boost its reputation (Pinho de Lencastre 1992: 117). The late start of French Caribbean rum-making probably made French Caribbean distillers less prone to conservatism. In the mid nineteenth century, a wide variety of still-types operated in Martinique and, although many plantations continued to use traditional pot stills, often referred to as 'Père Lalloué-type stills', after the necessary refinement descended there at the end of the eighteenth century, some plantations employed modified pot stills with continuous still-heads (Pinchock 1999: 64). Unlike their British Caribbean counterparts, the French also frequently employed continuous stills. Although pot stills were common on sugar plantations, the vertical distillation-type factories established towards the century's end at the rise of large industrial distilleries, especially in the Martinique port of St. Pierre (Karslygan 1996: 25).

Plantation and colonial officials distinguished between rum *agricole*, made from pure sugar cane juice on sugar plantations, and rum *industriel*, made from molasses or by rum distillation. Plantation distilleries could produce about 150 gallons of rum per day, while large urban distilleries could produce as much as 1,500 gallons per day. Many considered rum *agricole* much as their predecessors from British distillery in Martinique, a particularly fine spirit due to the heavy use of pure cane juice and the rum distilleries' use of production officer *bonnets* (1990). The practice of aging the product in oak barrels may have also been a distinguishing feature of rum *agricole* (Rodriguez 1990: 27). However, by the 1850s, large urban distilleries in St. Pierre came to dominate rum-making and large amounts of molasses were imported from other parts of the Caribbean, including Guadeloupe and French Guiana, to feed these distilleries (Pinchock 1999: 66-77).

French Caribbean rum makers also appear to have been more cautious than their American counterparts in experiment with patented claims of purity. The use of

colonialist point of view highlights the growing economic implications of French Caribbean rum making and the progressivism of French Caribbean-owners. The use of colonialist rhetoric of 'poor' may also reflect the French Caribbean planter's misanthropic pride as Louis Duhaucq, the French biologist who discovered that alcohol was produced by the action of micro-organisms on sucrose (Karsenty 1988/90: 133, 142, Parnish 1990: 207-208).

#### *Agave-based rum/Spanish Caribbean*

In the seventeenth and eighteenth centuries, Spanish Caribbean rum making was minimal. A few plantation-owners produced rum for local consumption and small farmers and slaves produced fermented guape. In the late eighteenth century, Spanish officials began lifting taxation against Spanish Caribbean rum making. Sugar plantations in Cuba, Puerto Rico, Venezuela, and Santo Domingo benefited from a variety of global and regional events. The American Revolution and subsequent economic ties between the United States and the French Caribbean opened a new market for Spanish Caribbean rum making. In the 1790s, the American Revolution decreased sugar making in France's largest colony and left a huge void in world markets for Spanish Caribbean sugar planters to fill. Cuba emerged especially strong. Between 1789 and 1817, restrictions on Cuba's trade with foreigners were progressively eliminated and the success of Cuban sugar making provided more raw materials for distilling. By 1830, Cuba was the world's leading sugar producer and by the end of the nineteenth century, Cuba was one of the largest rum producers.

However, Spanish Caribbean rum makers also faced serious challenges. Early machines against rum making meant that owners had little experience with advanced distilling techniques and, as a result, Spanish Caribbean rum making remained an artisanal industry. In the 1790s, a large number of St. Domingue planters fled to Cuba bringing with them slaves, rum making equipment, and capital, yet, in view of the poor reputation of French Caribbean rum in this period, migrants from St. Domingue probably did little to

improve Cuban rum-making practices. French colonial regulations from French and Louisiana, as well as those from metropolitan France, probably also applied various to Cuban rum-making. Yet, in order to compete in the world market, Cuban rum-makers would be forced to modify their product. In the first decade of the nineteenth century, Cuban began to make distinctions between *aguardiente de uva* and *ron*. *Aguardiente* appears to have been equivalent to French *Cordillacrum induratum*<sup>1</sup> while *ron* was equal to French *Cordillacrum cham. agavevole*. However, Spanish *Cordillacrum rum* makers appear to have placed greater emphasis on the aging process, rather than, like the French, on the ingredients. Rum was aged in oak barrels while *aguardiente* was not. In addition, while *cham. agavevole* was produced on sugar plantations in the French Caribbean, *ron* was typically produced in large urban distilleries suggesting a greater use of molasses, rather than pure cane juice. Cuban rum makers made significant advances in the nineteenth century but the War for Cuban-Independence (1895-1898), as well as the American occupations that followed disrupted further gains in Cuban rum-making.

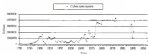


Figure 1.5 Cuban rum exports (average 1780-1800) from England (1780-1800) (43-46) 1800-1804 from Mexico and Havana (1800-26)

The first big jump in Cuban rum exports occurred after the American Revolution. In the 1780s, rum exports averaged about 11,500 gallons per year. According to Benjamin Mottet W.J. Gifford (1873 124), trade restrictions forced U.S. ships to Cuba where they obtained rum for U.S. families and purchases. Cuban rum helped fuel the great

American drinking habits of the late eighteenth and early nineteenth centuries. However, the United States also made its own rum and, in the 1790s, Cuban molasses and rum exports were nearly equal.<sup>1</sup> Although Cuban rum exports increased, the rise in U.S. whiskey drinking, the demand for Cuban molasses, and the success of early temperance movements eventually limited the U.S. market for Cuban rum.

The second jump in rum exports occurred during the 1790s, when the Haitian Revolution severely damaged the world's largest sugar producer. In the 1790s, Cubans sought to exploit an *Saint Domingue* vacuum. Cubans expanded rum production, which increased availability of rum, molasses, and sugar cane juice for rum distillation. In 1790 the year before the slave uprising, Cuba exported about 175,000 gallons of rum. By the first decade of the 1800s, rum exports averaged almost 900,000 gallons per year. The increased availability of raw materials for rum distillation, as well as the disruption of French and British Caribbean trade during the Haitian Revolution, set off a peak in Cuban rum exports at the height of the conflict in 1802 of more than 1.5 million gallons, a level that would not be exceeded again for another half century (Figueroa 1979: 33–46–48). The peak in rum exports also coincided with the last year of the U.S. whiskey tax and American still owners' early opposition to British Caribbean rum, may have been increasing rum imports from Cuba as a good reason to resist the tax and encourage national whiskey making. Regional exports of Cuban rum probably also helped sustain the alcoholist demands of the large number of European soldiers and sailors arriving in the Caribbean at this time. Yet, while Cuban rum production was increasing, Cuban molasses exports were still more important to the Cuban economy. *Saint Domingue* was the largest exporter of molasses to the United States and, after the Haitian Revolution, Cuba emerged as third rank. In the first decade of the 1800s, Cuban molasses exports were two and a half times greater than rum exports.

In 1815, Cuban rum exports fell dramatically. Peace in Europe disrupted important outlets for American grain and the surplus was made into cheap whiskey, which gladdened the



American market (Borahough 1979:83). Also, after 1818, better trade relations between the United States and Britain opened American ports to British Caribbean products, including rum. Although there was a slow and steady increase, Cuban rum exports increased around 500,000 gallons per year for the next three decades.

The third jump in Cuban rum exports began in 1824, the year that Britain opened its ports to foreign products, including commodities made in slave-holding regions. This was also the worst year of the Cuban crisis, which devastated European vineyards, including those in Spain. In the 1830s, Cuban rum exports averaged nearly 1 million gallons per year. In 1860, Britain equalized foreign rum import duties, putting Cuban rum makers on par with those in the British Caribbean (Borahough 1979:74-75). The following year, France also reduced import duties on foreign rum, probably to help lessen the effects of the Cuban blight (Kervelgaard 1996:487). The growth of U.S. sugar production in Cuba had a positive impact on the level of rum production, which became especially important during the U.S. Civil War. In 1864, Cuban rum exports reached record levels of more than 4.5 million gallons. The U.S. Civil War opened demand for rum and helped expand Cuban rum in the Americas alcohol market. The Franco-Prussian War (1870-1871) may have also contributed to the jump in exports (Borahough 1996). Although export statistics are incomplete for the second half of the nineteenth century, it appears that Cuban rum exports remained high during the phylloxera epidemic, which was having as great an impact on Spanish vineyards and was on decline in France. By the end of the nineteenth century, Cuba exported rum to the United States, Spain, Germany, and Britain, and challenged Denmark for second place behind France as the world rum market (Kervelgaard 1996:488).

Sugar, however, was still the dominant industry in Cuba. By 1829, Cuban sugar makers had produced all of the British Caribbean colonies combined. The rise of European sugar beet industries had less of an impact on Cuban sugar planters than on their British and French counterparts. Beet sugar drove the European market to Spanish Caribbean rum sugar that the U.S. market, which lacked substantial cane or beet sugar industries,

remained open. By the 1880s, 60% of sugar consumed in the United States came from Cuba. Much of the remaining 40% came from Puerto Rico and the Dominican Republic (Figueroa 1996).

In the mid nineteenth century technology change propelled Cuban sugar-making forward. Railways, steam ships, and telegraphs improved the infrastructure for sugar making. New coastal factories emerged on fertile lands. Experiments created sugar plants and machinery such as steam-driven graders, various pans, and centrifuges, which extracted twice as much sugar as the traditional methods yielded. In 1880, 70% of Cuban sugar mills were steam-powered and there were 60 large mills using the vacuum pan process. That number continued to grow in the late nineteenth century (Figueroa 1996, Scott 1985:33).

As a result, rum in Cuba never achieved the dominant economic position that it did in Hispaniola, Guatemala, and Panama. Cuban sugar planters relied less on rum revenues than their British and French Caribbean counterparts. Throughout the nineteenth century, Cuban rum exports remained well below 1 gallon per cwt. of sugar. While sugar planters in Jamaica and Martinique diversified their industries, Cubans were still exporting large amounts of raw molasses. For example, in 1884, Cuba exported more than 35 million gallons of molasses and only 4.1 million gallons of rum. Export revenues from rum were not significant and Cuban historian Manuel Moreno Figueroa (1993:88-89) did not find the need to document among Cuba's sugar exports. In the last quarter of the nineteenth century, sugar, molasses, and tobacco represented 95% of the value of Cuban exports to the United States, the largest market for Cuban goods. Rum and other goods accounted for the remaining 5%.

One reason for the low level of rum exports may have been the advanced sugar production methods employed in Cuba. High-tech vacuum pans and centrifugal methods of extracting sugar left less molasses for distillation. According to American traveler William Henry Hoffman (1854 and in Pless 1992:56),

Many aggressive applications of chemical and mechanical sciences led an interest in De Koenig's ideas, which were conveyed by a Frenchman who had seen some sugar estates and who, according to the West Indies, could not work profitably for pure machinery. The main stumbling to use of one of these arrangements was the centrifugal process. The machines, which he did designed rather occasionally drilled into the usual design of apparatuses as constructed by the process into sugar

The centrifugal and vacuum pan processes produced a clear and lighter sugar and extracted more of the sucrose obtained from the cane than sugar rather than to molasses and waste for distillation. In the late nineteenth and early twentieth centuries, some of the older French Caribbean colonies, like Guadeloupe, still produced the traditional and less-efficient muscovado method, which produced dark blackstrap molasses that found a good market in Europe and North America (Blaughey 1957: 74). The negative impact of centrifugal and vacuum pan processes on the level of rum-making is evident in the detailed Colonial Office reports from Jamaica. In 1885-1887, the reports revealed that, on plantations where the method of sugar production was identified as "ordinary open factory of beets," the average gallons of rum per cent. of sugar harvested on plantations where the method of sugar production was listed as "vacuum pan" the average rum was 5.6 gallons of rum per cent. of sugar and on plantations where the method of sugar-making was listed as having both "vacuum pan and centrifugal" the value was only 3.1 gallons per cent. of sugar.

The slow transition to free labor also reduced levels of Cuban rum-making. In part, rum-making in Jamaica, Suriname, and Dutch sugar expanded to offset the high cost of labor that followed slave emancipation. Yet, slave emancipation did not have such a devastating effect on sugar production in Cuba. The strong U.S. market and the high productivity of mechanized sugar-making reduced the impact of slave emancipation on Cuban sugar producers. In 1874, the Moral Law began the gradual process of Cuban slave emancipation. By 1881, an apprenticeship system known as the *patronato* was created to smooth the transition to free labor. Cuban officials and politicians, former slave owners, maintained tight legal control over former slaves through regulatory laws, trade protection, wage controls, and rural policing (Scott 1983: 221-226). As in some parts of the British and

French Caribbean, Asian workers, including 125,000 Chinese, were brought in to maintain sugar supplies (Scott 1983: 128). As a result, sugar production continued to increase until the War for Cuban Independence (1795–1895) (Figueroa 1991: 31–40).

In 1808 Francisco Borelli, a Caribbean immigrant, migrated to Cuba and settled in Santiago de Cuba. Within a decade of his arrival, he began selling rum for John Platts, an Englishman who had established a small distillery in Santiago de Cuba to compete with rum makers in Jamaica and Martinique. In 1818, Borelli, with financial backing from his brother José, purchased Platts' distillery and started what was to become a rum empire. In 1826, at the International Commercial Exposition in Philadelphia, Borelli's rum won its first international award beating out Jamaican competitors who at the time were considered the world's best rum producers. During the Ten Years War (1868–1878) Borelli supported the rebels while his son Emilio's credits supported the nationalist cause. After the war Emilio was exiled to North Africa, but returned in 1883 to make over operations. During the War for Cuban Independence, Emilio was an officer under the command of José Martí, brother of the revolutionary hero Antonio. In 1897 Emilio was captured and exiled to Jamaica. The Borelli rum distillery fell into ruin. In 1898, after American intervention, Emilio returned and was appointed Mayor of Santiago de Cuba by the American commander Leonard Wood. In an effort to regenerate the economy after the revolution, Wood encouraged the United States to resume trade with Cuba, including trade in Borelli rum (Pruitt 1990).

In the nineteenth century, rum-making in Puerto Rico, Venezuela, and the Dominican Republic produced rum for local consumption. Puerto Rican sugar making was less mechanized than that of Cuba and lacked the infrastructure support. After slave emancipation in 1875, Puerto Rican sugar production declined and little rum was exported. In 1875, Puerto Rico exported about 50,000 gallons of rum and a large amount of molasses, much of it to distilleries in the Danish Virgin Islands (Kerfoot 1946: 474; Perrot 1995: 15). Rum making there, in St. Thomas and St. John, emerged after the

*American Revolution*. Between 1777 and 1821, the two islands exported nearly 3 million gallons of rum per year. In 1779 exports peaked at more than 4 million gallons, although much of that rum probably was produced in French and Spanish-Caribbean and re-exported to the United States. By 1843 rum exports from the Danish Virgin Islands were about 250,000 gallons and, for the rest of the century, rum exports averaged just below 100,000 per year (Karlsgaard 1946:417).

Yucatecan rum-making also emerged in the nineteenth century. John Nilsson, an English-slaveholder and migrant who arrived in Yucatecuela in 1813, and the Grimlings, a powerful Dutch mercantile family, are credited with sparking Yucatecan rum making. The arrival of Corsican migrants in the mid-nineteenth century also contributed to the rise of Yucatecan rum making, especially in the eastern provinces of Campeche and Quintana Roo. Corsicans introduced French rum-making techniques, which had greatly improved by the mid-nineteenth century. New know in rum production and sale, as well as high taxes on luxury imports, helped fuel Yucatecan rum making. Most of the rum and agricultural production Yucatecuela was consumed locally and, by the 1840s, annual per-capita consumption reached nearly 3 gallons (Pérez de Lema 1907: 117-121; Rothgait 1990:60). In 1880 rum from Campeche and exceptionally well-taste Pima molasses and enhanced the reputation of Yucatecan rum. Yet, in the nineteenth century, little Yucatecan rum was exported. According to Yucatecan-American José Rodríguez (1930:66), Le Havre and Bordeaux were primary destinations for Yucatecan rum and probably reflect the influence of Corsican merchants on the Yucatecan rum trade.

In the 1870s, the Dominican Republic produced more than 3 million gallons of rum, but, despite being one of the largest rum makers in the Caribbean, rum was exported. Like Barbados, Dominicans consumed all of the rum they produced. In addition, Dominicans consumed large amounts of the low alcohol content variety of rum called *claret*, which was usually made in small quantities (Pérez 1928:104,114-117). Rum making emerged in other regions, growing in part of Latin America. In Ecuador

Guatemala, Honduras, El Salvador, and Paraguay, most of whom especially produced a variety of raw-made with-cotton. Raw-making primarily for local demand – especially in tobacco and bread (Karlsgren, 1995: 480–481).

### The Expanding African Slave Trade

After the abolition of the Atlantic slave trade, the West and West Central African trade continued to be sustained with alcohol – much of a Caribbeanan (Dillon T. S). The African trade had shifted from slaves to commodities needed to help fund the industrial revolution in Europe and North America. According to historian David Eltis and Lawrence Jennings:

It is probable that at some point between 1640 and 1850 the traffic in African goods surpassed the slave trade in value. Taken as a whole, the 1840s were probably similar to the 1420s in that the slave and commodities trades were roughly balanced, with the commodities trade perhaps worth slightly more.  
(Eltis and Jennings 1984: 900)

In the mid-seventeenth century, gum, pepper, rubber, cocoa, and palm oil and other palm products were the major African exports. Alcohol remained a central part of the African trade. For example, according to Eltis and Jennings (Eltis and Jennings 1989: 900), African alcohol exports annually averaged 750,000 gallons in the 1750s, 1 million gallons in the 1820s, and 6.1 million gallons in the 1850s – an almost ten fold increase in just 80 years. The rise of a readily-transported African beer grain probably increased the overall demand for western alcohol in beverages. Migratory workers in the coastal regions – who confronted local taxes, slavery, and diseases in their studies in bars – also increased the demand for imported alcoholic beverages with high alcohol contents. As a result, it presented the flow of western alcohol to western and European sailors – who drank alcohol in massive drinking. In addition, the primary role of slaves in the African trade probably reflects attempts by metropolitan governments to keep goods flowing, as much as possible, within self-contained regions.

The British selectively ran alcohol exports to West Africa and – in the mid-eighteenth century, the value of British alcohol exports to West Africa steadily increased.

Historian Joseph Iliffe (1959:64-65) showed that, in 1820s, the value of alcohol exports represented an annual average of 14% of British exports to West Africa. In the last years of the 1840s, alcohol exports jumped to an annual average of 24%. The alcohol trade was especially strong in the Gold Coast. In 1830, over 1.2 million gallons of alcohol were imported, the majority of which was rum (Akyeampong 1997:64-65, Oronsaye 1974:76-81). In 1864, the Gold Coast imported 1.7 million gallons of alcohol, about two-thirds of which was rum (Akyeampong 1997:85). French West Africa also imported huge amounts of rum. In 1879, Delagoa Bay imported almost 700,000 gallons of rum and, in 1894, rum accounted for 40% of the value of Delagoa Bay imports (Manning 1990:148,154).

Table 2.3. Estimated distribution by volume of imports into western Africa in the 1820s and 1890s

			wine		rum		other		
	imports, million	alcohol, million	imports	percentage	rum	percentage	other	percentage	other
1820s	50.4%	11.4%	7.8%	9.3%	1.1%	1.3%	14.1%	16.6%	—
1890s	31.4%	12.2%	11.7%	4.8%	4.4%	3.2%	7.7%	6.4%	17.3

Source: This and Akyeampong 1994:193.

Colonial administrators in Africa complained that excessive alcohol use created serious social problems. In 1899 an international convention gathered in Brussels to discuss the African liquor trade. At the convention, officials representing the major colonial powers agreed to ban liquor from parts of Africa with a recent history of spirit use (Akyeampong 1997:82, Pina 1976:1). However, the need for import revenues blocked liquor restrictions, particularly in the Gold Coast where, between 1888 and 1912, liquor taxes represented about 40% of colonial revenues (Akyeampong 1996:81). Growing fears about social deviance, as well as pressure from temperance-minded missionaries and African chiefs, led British officials at the 1914 international liquor convention in St. Germain-en-Laye, France, to support greater controls (Akyeampong 1996:82). British administration in the Gold Coast experimented with prohibitions and tighter alcohol trade restrictions in the 1920s and 1930s, but these efforts largely failed due to the need for colonial import revenues and the use of illicit gin production, which became widespread in defiance of popular culture along the Gold Coast (Akyeampong 1996).

### Rain-Making in the Twentieth Century

At the beginning of the twentieth century, Caribbean sugar continued to suffer from a glutted market, serious pricing problems, and a crucial alternative. Despite the 1902 Hay-Pauncefote agreement, which mandated the lowering of sugar trade barriers, world overproduction led to an almost complete collapse of Caribbean sugar sales. In 1908, Britain imported 1.6 million tons of sugar, of which only 120,000 tons were from cane (Horsman 1964: 32). In 1913, Britain reported less than 100,000 tons of sugar, the lowest rate of production since the seventeenth century. Central American and West Indian small-scale sugar-making operations, Cuba, which benefited from a strong U.S. market and technologically advanced sugar-making methods, was the major exception to the rule. The rise of U.S. interests in Cuba, especially after the War for Cuban Independence, resulted in professional trade deals that helped make Cuba and other Latin American nations, including Puerto Rico and the Philippines, the main suppliers of the U.S. sugar market. This restriction of the U.S. market was another major setback for British and French Caribbean sugar producers (Horsman 1964: 208).

The continuing decline of sugar production in the British and French Caribbean forced the ongoing expansion of rum making. In the twentieth century, Britain and France implemented professional rum quotas to help stabilize their colonies. Cuba also produced a large amount of rum, much of which was consumed locally or exported to the Spanish U.S. market. Two world wars and smaller conflicts throughout the century also spared Caribbean rum making as the number of servicemen who have often been the driving force behind alcohol trends, increased. Industrial sugar cane listed alcohol also founds place as the war effort. Rum making incorporated new raw sugar cane-growing regions, including parts of Southeast Asia and West Africa. By the end of the twentieth century, the rum industry was taken over by multinational companies and dominated by particular brand names.



However, nineteenth-century Caribbean sugar colonies also confronted with social change. Beginning in the early nineteenth century, large-scale temperance reform movements emerged throughout the world. Popular reform movements were the focus and models of change in Europe. For example, in the late 1830s and early 1840s, nearly 75% of Ireland's adult population became members of the Craft, Total Abstinence Society (Sheehy 1981:60-64). The national movement to ban alcohol emerged in the same decade (Woolf 1997). New attitudes about drinking led to the eventual abandonment of rum rations in the British Royal Navy in 1900. In the late nineteenth and early twentieth centuries, scientists and physicians in Russia defined the causes of alcoholism and sought reform (Sawin 1994). French physicians also struggled to define the parameters of the French alcohol problem (Sheehy 1997). Missionary-based temperance movements emerged in Africa, the Caribbean, and the Pacific. Occasionally, reformers won some successful support. In the late nineteenth and early twentieth centuries, for example, metropolitan officials and colonial administrators greatly restricted the liquor traffic in Africa (Munyonyo 1997, Pan 1994).

Temperance reformers were probably more successful in the United States, one of the main markets for Caribbean rum. Per capita consumption of absolute alcohol fell from a highest 3.9 gallons in 1830, to 1 gallon in 1850 (Rumbough 1999:232). In the late nineteenth and early twentieth centuries, the Women's Christian Temperance Movement and the Anti-Saloon League sustained the fight against alcohol use (Petersen 1994). By 1914, 30 states in the United States were "dry" and, in 1933, the U.S. Congress enacted the 18<sup>th</sup> Amendment, which prohibited the use of alcohol in the United States except for religious and medicinal purposes.

#### **British Caribbean Rum in the Danish West Indies**

The shrinking market for British Caribbean-rum sugar meant that rum continued to play a central role in sustaining British Caribbean producers and keeping British Caribbean sugar estates solvent. In 1803, Jamaica exported 157 gallons of rum per acre of sugar. The

low level of sugar production, however, also meant less cane and molasses available for rum making. Thus, while the rum-to-sugar ratio was high, the amount of rum actually exported fell below 1 million gallons. World War I disrupted American rum making and between 1913 and 1916, American rum exports averaged more than 1.3 million gallons per year. American rum helped fund the war effort. Rum was the allocated drink of the British armed forces – especially the navy – which still maintained its tradition of rum-rations. Allied navies also depended on the preparation of explosives and American spirits may have been used for that purpose (Data: 1910–1919).

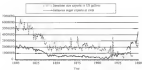


Figure 7-6: American rum and sugar exports (Source: 1898–1909 from Rogers 1907 II; 1910–1917 from Kiser 1964 240–249; 1918–1929 from C/O.)

Before the end of World War I, American rum exports temporarily collapsed. The war disrupted European sugar beet production, which led to a resurgence of American sugar production. Moreover, German submarines, a constant threat in the Caribbean, reduced shipping. In 1918, despite relatively good rum prices, America exported less than 200,000 gallons – the lowest level of rum exports since the mid-eighteenth century.

After World War I, American rum exports rebounded. In 1919, America exported more than 5 million gallons, more than it had exported in four decades. Part of this huge rise may reflect rum monopolized during 1917–1918, which was not sent due to the lack of safe shipping. The destruction of European sugar beet industries during World War I

repressed sugar prices and represseded Jamaican interest in sugar production. Jamaican sugar exports jumped from a low of 78 000 cwt. in 1913 to 1 043 000 cwt. in 1922. The growing mechanisation of Jamaican sugar making left less than material for rum-making and reduced the level of rum exports. After World War I Jamaican rum exports typically remained below 1 million gallons per year for the next two decades.



Figure 5.7 Jamaican rum exports (sources: 1820-1832 from Rogers 1927:16; 1910-1917 from Bowser 1965:345-280; 1921-1950 from C.D.).

In the early twentieth century, rum-makers in Dominica continued to use produce and rum exports from its banana. Between 1927 and 1961 Dominica exported an average of more than 4.8 million gallons of rum per year. Yet, as with Jamaica, rum production dropped after World War I. Post-war times show nationally sugar markets before the creation of an 'Imperial Preference' system. The system included the Commonwealth Sugar Agreement, which implemented sugar and rum quotas that brought greater stability to British Caribbean economies (Newman 1964:27-32). Between 1931 and 1959 Dominica produced an annual average of about 1.8 million gallons of rum and exported an average of about 1.1 million gallons per year (C.D. 1969). In the 1950s and 60s, South Africa also emerged as a major player in the British rum trade. In 1952, a quarter of the rum exported into Britain came from South Africa and, in 1955, South Africa exported more rum to Britain than did Dominica (Kearney 1966:405). In the 1950s, about a quarter of the rum

exported into Britain was as expected, Canada, Newfoundland, Germany, and Ireland were the main destinations for British raw op exports (Korvelgaard 1988: 400).

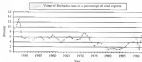


Figure 7-6 Barbadian raw op exports (sources: C.O. 1946:1763; Weyell 1981: 72-73; LORIC 1988:1762)

After World War II a lack of growth in British reduced Barbadian op production and led to a temporary stagnation in British Caribbean raw op exports (C.O. 1949:48). Both Germany and Jamaica raw exports jumped to 2 million gallons, although some of this raw op export was re-exported during the war. Sugar refiners also began to diversify their molasses into industrial forms of alcohol, which were used in synthetic rubber fuel. In 1951 the Jamaica Assembly approved legislation requiring that molasses alcohol made from sugar by-products be mixed with grain for use as a "motor spirit" (Shannon 1964:171 C.O. 1966: 192: 33). Barbadian raw exports, which were all bound for the late nineteenth century, then rebounded. In the 1930s, Barbadian raw exports averaged about 100,000 gallons per year and, after World War II, raw exports represented 3-7% of the value of all exports until the early 1970s. While raw exports remained steady, their relative value declined as Barbadian began to diversify its economy and export a greater variety of high-valued goods.

#### **French Caribbean: From Molasses to the French West Indies**

At the beginning of the twentieth century, raw represented about 10% of all the exports generated in France. In the French Caribbean, Mauritius was the source of raw

making industry. In the 1890s, it exported four times more rum than its French colonial neighbor Guadeloupe. In the shadow of Mount Pelée, the port town of St. Pierre was the hub of the Martiniquais industry. It was the primary destination for molasses from Martinique sugar plantations that had no distilleries, as well as for imported molasses from Guadeloupe, St. Kitts, and Dominica. On May 8, 1902, Mount Pelée erupted killing more than 40,000 St. Pierre residents and destroying the concentrated rum-making center. In 1899-1901, Martinique exported an average of about 4 million gallons of rum. For the three years following the eruption (1902-1904) rum exports were cut in half. The eruption destroyed the large urban distilleries. Many Martiniquais sugar planters took advantage of St. Pierre's demise and upped their distilleries in order to produce high quality, state-of-the-art rum brands.

World War I had a positive effect on French Caribbean rum production. The war disrupted wine and brandy making throughout Europe. Rum had large numbers of soldiers, who had historically provided an important market for Caribbean rum. The French also used rum in the preparation of explosives (from 1914-1915). The war effort boosted boom in rum industry operations. The number of distilleries in Martinique grew from 46 in 1910 to 56 in 1917. In the period 1910-1917, Martinique exported over 30 million gallons of rum and, in 1918, more than 7.5 million. Between 1917 and 1919, rum represented 15% of the total value of Martinique exports (from 1901-1914-1923).

However, rum production had to stop production and declining rum prices. In 1922 and 1923, despite complaints from national wine and brandy producers, the French government was forced to intervene and implement a quota system for the French rum producing colonies. The French export quota was set at 140,000 hectolitres (4,227,243 gallons) of pure alcohol. Martinique was given the largest share: 80,000 hectolitres (2,411,606 gallons). Guadeloupe 40,000 (1,205,803 gallons), and Réunion 20,000 (475,561 gallons). The remainder was to come from other French colonies in the east. Between 1920 and 1923, rum still represented a considerable 60% of Martinique exports. In 1923,

France established l'Office National de l'Alcool to help small Caribbean rum affairs and make adjustments to the quota system. In 1924, Martinique's rum quota was increased to 115 000 hectolitres (4,871,795 gallons) and eventually extended until 1939 (Jérome 1986: 64). In Martinique, the number of distilleries reached 170. However, the decline in rum prices and the loss of sugar and banana exports decreased the overall value of rum to the Martinique economy and, between 1933 and 1937, rum represented only about 2.1% of the value of exports. By the 1940s, rum represented between 30% and 35% of all exports destined to France (Kervégat 1964: 487). Ernest Hemingway, and other great writers, poets, and artists, as Faulkner's and Hemingway's life behind glassed Martinique rum (Hemingway 1987: 8).

After World War II, restrictions continued and rum-making rebounded. In 1949, rum represented nearly half the value of Martinique exports (Jérome 1986: 109). The quota system characterised all distilleries in Martinique and Guadeloupe. These distilleries that survived were usually associated with reputable names, like Solon-Jacques, that produced rum exports, as well as big wheat agribusiness that produced rum, indicators of a large-scale (Jérome 1986: 127; Parnick 1993). In 1958, however, rum as a value of total exports, dropped to only 14% due to the increasing exports of bananas.

Rum export control to reverse French-Caribbean rum making, in the 1950s, Martinique mainly abandoned rum making and channelled nearly all of their sugar cane juice to their distilleries. In 1953, Martinique produced 2,764,024 gallons of pure alcohol and only 77,545 cwt. of sugar. In contrast, Guadeloupe continued mostly more heavily in sugar. In 1953, Guadeloupe produced more than 1.1 million cwt. of sugar and only 1.8 million gallons of pure alcohol. A small number of distilleries decreased rum-making in Martinique and Guadeloupe. In 1969, quotas were revised and fixed at 5,394,027 gallons of pure alcohol. Martinique received the biggest share, about 40%. Guadeloupe received 30%, Réunion 10%, French-Guiana 1% and the Republic of Madagascar 7% (ICOM 1980: 23). In 1982, in Martinique, there were 11 distilleries.

opening, less than one fifth the number that existed in 1932 (Daneel 1988:217). Protestantism extended in the period the plantation and brock of slave growth including Trinit-Trinidad, Saint James, and Maricao (Daneel 1992:50). In the late 1880s and early 1900s, production of slave growth was less to five times greater than slave industry/ Spanish Caribbean Plant-Making in the Twentieth Century.

In the early twentieth century, cane makers in Cuba, Puerto Rico, Venezuela, and the Dominican Republic produced cane on about the same scale as their French and British Caribbean counterparts. Recently lost land sugar and plantation trade agreements during the period of U.S. interventionism ensured that the United States was the main market for Spanish Caribbean goods. Cuba began the century as the leading Spanish Caribbean cane maker, but cane makers in Puerto Rico were to make significant advances, especially after the Cuban Revolution.

In the late nineteenth century, Cuba was the leading producer, Dominican and Jamaica for sugar and in the Caribbean cane industry. Cuban cane exports varied greatly from year to year. In 1891, cane exports reached 2.2 million gallons, almost double the exports of the year before. In the 1890s, the War for Cuban Independence (1895-1898) disrupted the progress of Cuban cane-making. Although we lack year-by-year statistics for the late nineteenth century, Cuban cane exports were probably very weak. During the war thousands of hectares of cane fields were abandoned (Figueroa 1996:139). Cuban sugar production dropped to 271,000 metric tons, less than one-quarter of its pre-war level (Figueroa 1998:33-46). Molasses exports also crumbled and, for example, in 1897, Cuba exported less than 100,000 gallons.

In the early twentieth century, Cubans diversified great deal of sugar cane into industrial and non-cane. They produced high quality cane, less industrial sugarbeets, and industrial alcohol. Between 1900 and 1904, exports of cane, sugarbeets, and industrial alcohol averaged nearly 1.4 million gallons per year.

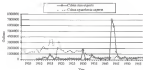


Figure T-9 Cuban rum and aguardiente exports (source: Ministerio de Hacienda, 1959 [6-37]; American Chamber of Commerce in Cuba, 1958 [27] (see also Figure 1952 [27-10])

Cuban aguardiente production increased during the U.S. occupation, but dropped in 1938 as U.S. sanctions related to rum. Yet, as noted in the history of alcohol, the returning troops brought back a taste for Cuban rum, including the specially rum-based drink known as the *Duquenois*, which they had been introduced to while stationed in the southern portions of the same state (Foster, 1990, Data, 1947 [22]). Although aguardiente production declined after the U.S. occupation, exports rose steadily in the early 1930s. Aguardiente probably fed a variety of markets, including Spain, Italy, parts of South America, and the United States. Higher rumley rates, on the other hand, was probably reserved exclusively for the U.S. market (American Chamber of Commerce, 1958 [6-10]). In 1935, Cuba exported more than 4.2 million gallons of aguardiente and rum, four times what it had imported only six years earlier. World War I initially was a boon for Cuban rum makers, but the lack of safe shipping in 1917 led to a collapse in exports. In 1947 and 1950, Cuba exported an annual average of more than 2.6 million gallons of aguardiente and rum, much of which was probably multiplied during the war.

Cuban aguardiente and rum exports fell off in the 1950s and the deep recession with the passage of the 18<sup>th</sup> Amendment. The sharper drop in rum exports, relative to



apocryphal reports, supports the argument that rum was primarily made for the U.S. market. Between 1911 and 1925 rum and aguardiente exports fell to 1.5 million gallons per year.

Rum-smuggling, comparable to modern-day drug trafficking, became a lucrative underground industry during prohibition in Batemansville. Rumrunners brought their product through U.S. borders in Canada and Mexico. Merchants in Honduras re-exported French Caribbean rum to the small islands of St. Pierre and Miquelon off the coast of Newfoundland. From there it traveled west to the coast of Long Island (Pointe de L'Anse 1987: 186). Rumrunners used the island of Puerto in the Bahamas as a base for the illegal re-exportation of Cuban rum to the coast of Florida. William McCoy, a rumrunner who sailed the waters between Puerto and the Florida coast, earned only quality rum and may have been the inspiration behind the song "Rum Runners and McCoy." Although arrested and imprisoned, McCoy became a folk hero to American bootleggers (Mintz 1987: 30).

The ban of the U.S. alcohol manufacturing prohibition was especially based on Cuban rum makers. However, alcoholic beverages were not the only use for alcohol. In the 1920s, Cuban distillers produced alcohol for a variety of industrial purposes. Distillers distilled sugar cane juice, molasses, and more to make natural and denatured alcohol, which were used in perfumery and hospitals. Alcohol was also used to make gaspander and kerosene oil. Most importantly, the Cuban government required that motor fuel be a 20:80 blend of alcohol and gasoline (American Chamber of Commerce 1925: 173; France 1932: 30-35; Pérez-López 1991: 187-188).

During prohibition, thousands of American tourists flocked to Cuba where they were introduced to Cuban rum, especially that made by the Bacardi distillery. According to U.S. military two decades later, American tourists brought back more for Cuban rum. In 1925, Congress passed the 27<sup>th</sup> amendment, which repealed prohibition. The following year Cuban rum exports reached 500,000 gallons. Apocryphal reports remained mostly at best less 300,000 gallons subject to that higher quality Cuban rum was specifically

disrupt for the U.S. market. In 1935, Spanish distilleries produced over 500,000 gallons of rum and it was one of the largest distilleries in Cuba. In 1939 and 1940, Spanish production was over 400,000 gallons in total, more than half of all rum collected from Cuban distilleries (Ferrer 1992:100-113). It was one of the most valuable companies in Cuba.

During World War II Cuban rum exports skyrocketed as the conflict disrupted European alcohol markets and reduced their availability of locally-produced spirits. The fear of food shortages included the distribution of grains. Cuban rum makers, like Amann and Martorell, rum makers in World War I, took advantage of the unstable alcohol market and flooded it with rum. In 1943, Cuba exported more than 7 million gallons of rum, much of it to help meet the demands of soldiers and sailors in Europe, the Pacific, and Africa (Gonzalez de Hazaola 1997:27).

In 1959, Fidel Castro came to power and in 1961 the United States imposed economic sanctions against Cuba. The Revolution decreased Cuban rum exports. The Union of Soviet Socialist Republics became the main destination for Cuban rum, but the Soviet government's monopoly on liquor and the Russians' demand for a large volume lowered the export market for Cuban rum. Potentially, per capita rum consumption in Cuba appears to have increased, perhaps under the influence of American tourism that began in the early twentieth century. As early as 1925, an American tourist, recognizing the negative consequences of American influence, wondered how long it would take for America to convert Cuba "into a nation of drunkards" (Babson 1943:77). The system of government rum sales, implemented during the Cárter regime, has probably also led to increasing per capita rum consumption rates. In 1945, Cuba produced 10,775,140 gallons of rum and exported only 375,140 gallons, about 3.5% of its total produce. In 1947, Cuba produced 12,071,334 gallons of rum and exported only 467,433 gallons, about 3.9% of its total. Cuba's production of ethanol for industrial purposes, including motor fuel, was even more impressive. Between 1978 and 1997, Cuba produced 270 million gallons of industrial ethanol. In 1997, Cuba exported more than 6 million gallons, about 2% of its produce

(Pérez Luján 1991: 124-126; see also Magallanes 1974: 130). In the 1980s, the revolutionary government's interest in cattle derived exclusively from difficulties in cattle feed. According to historian Jorge Pérez Luján (1991: 188), the policy has "undermined Cuba's alcohol industry."

In the 1980s, Cuba's economic relationships with the rest of isolated governments in the Caribbean led to American interventionist policies, which included economic sanctions for the rum trade. On April 15 1983, the U.S. government signed public hearings on the Caribbean Basin Economic Recovery Act, part of the Ronald Reagan administration's Caribbean Basin Initiative (CBI). CBI sought to bolster the economies of the Caribbean through tariff reductions. The Act offered discretionary tariff reductions and tax incentives to Caribbean non-nations. The Act also transferred all revenues from rum excise taxes to Puerto Rico and the Virgin Islands. Many islands benefited. In Barbados, the value of rum as a percentage of total exports increased to pre-1970 levels. In 1982, rum represented almost 7% of the total value of Barbados exports reflecting the growth of the U.S. rum market, which was a goal of CBI.

The biggest beneficiaries of American interventionism in the Caribbean, the Cuban Revolution, and CBI were Puerto Rico and the U.S. Virgin Islands. By the early 1980s, the U.S. dependencies of Puerto Rico, St. John, and St. Thomas were emerging as the major rum exporters to the United States. In the 1980s, whiskey, gin, and brandy were the primary distilled spirits consumed in the United States. Rum represented only about 2.5% of spirits consumed. It was during this period that Puerto Rico modernized its rum industry and took advantage of the preferential trade policies with the United States. In 1985, Puerto Rico produced about 93,000 gallons of rum and exported only about 15,000. Rum production and exports increased until, in 1997, Puerto Rico produced 5.1 million gallons of rum and exported 700,000 gallons mostly to the United States (Kawaguchi 1998: 475-476, 488).

During World War II, food rationing led the United States to restrict the production of alcohol made from grain. By the beginning of World War II, rum exports from Puerto Rico and the Virgin Islands surpassed those of Cuba (Kornegay 1946:490-495). In 1944, Puerto Rico exported 6.1 million gallons of rum and the Virgin Islands exported more than 24 million gallons of rum mainly to the United States (Kornegay 1946:495-496). The Civil War was especially helpful to Puerto Rico. In 1939, the Bureau found that Cuba had dismantled operations in Puerto Rico. Since then, Puerto Rico has become a independent corporation and a major player in the world spirits market. In 1993, Puerto Rico and the Virgin Islands exported more than 21 million gallons of rum to the United States. Puerto Rico contributed 90% of that total. In contrast, Jamaica, the next largest supplier under CBE, exported only 189,740 gallons to the U.S. market.

#### Machinery/Case

At the end of the twentieth century, rum has become one of the world's most widely used spirits. In 1992, the world consumption of rum was more than 132 million gallons of proof alcohol or 264 million gallons of proof spirit. Rum accounted for 11.4% of the world-distilled spirits market, and was the thirteenth widely consumed distilled spirit. Whiskey had the largest share of the world market with 20% and brandy was in second place with 14% (OECD or Institute of Economics for Development of Cases-Mig 1993:21).

Since the 1980s, the consumption of distilled spirits has declined sharply in the United States reflecting the effects of anti-drinking campaigns and demographic change. Still, consumption levels are impressive and, in 1999, Americans consumed over 700 million gallons of distilled spirits (Brewster 1999:3000). Rum consumption reached 22.4 million gallons, which represented about 18% of all distilled spirits consumed in the United States. Manufacturing a trend that had begun in the early nineteenth century, whiskey had the largest share of the U.S. market with 37%. Vodka took 23% while brandy, cognac, tequila, gin, and various colorful and expensive made up the remainder. In Europe, rum is

the fifth-most popular distilled beverage and European accounts about 20% of the world's rum. However, the United States and Europe are not the largest markets for rum.

Bacardi estimates about 173 million gallons of rum are [consumed] each year (Lander 1997).

Most Caribbean rum sold today is produced once rummers made for large multinational corporations, which own the rights to various brand names. In 1984, Bacardi rum represented one of every twenty bottles of distilled spirits sold in the United States and Bacardi controlled 80% of the lucrative U.S. rum market. In 1999, more than 17 million gallons, nearly half of all rum sold in the United States, was Bacardi brand. Bacardi Martini USA is a \$2 billion company and is dominant force in the world's spirit industry. Although Bacardi rum is the flagship brand of Bacardi-Martini USA, it also controls a variety of other brands, including the popular French spirit, Dewar's Scotch whisky (Lander 1997). Recently, the powerful Bacardi organization has clashed with the Cuban government and the European Union over trademark rights to the *Alcoholic Club* brand name. In 1995, Bacardi purchased the *Alcoholic Club* name from Cuban family whose business was incorporated in 1963. Bacardi soon began selling its own brand of *Alcoholic Club*. *Perrier Bacardi*, a French company, and the Cuban government jointly control and market the *Alcoholic Club* brand in Europe and are suing Bacardi over the rights to the name. The World Trade Organization is reviewing the case.

The remaining half of the U.S. rum market is divided among a variety of smaller brands including other large multinational corporations. *King Aulique* owns a variety of distilled spirits, including *Alcorn*. *Gay rum* from Barbados, *Seagram's* rum and other popular American brands like *Myers* and *Captain Myers*. Seagram's exemplifies the structure of the modern spirit industry. Rum is distilled in Jamaica to a 100-proof (50% alcohol) and serves as Seagram's Mexican specialty under United States as tequila (tequila and rum are when it is adulterated to 50 proof) (50% alcohol). It is stored in 10,000-40,000

golden rule and it is easy to be fooled and legal for three years (Dimitrakou 1999). After aging, it is released on the market.

Advertising practices market Caribbean rum for multinational companies to a wide audience. In the past decade, some companies have redesigned their labels in order to find new markets. New varieties of rum, including ultra-flavored, have also been introduced. Yet, some brands like *Muscat Guy* and *Bacardí* have retained their traditional bottle labels. These bottle labels and the advertising campaigns for Caribbean rum shed light on the marketing strategies of Caribbean rum producers and the distribution of rum to consumers.

Alcohol content of the most heavily taxed and state regulated commodities and this is apparent on every rum bottle label. Caribbean rum bottle labels are loaded with information about the country of origin, volume of the bottle, percentage of alcohol per volume (proof), name of the distillery, branding, and bottling company, trademark, and whether it is awarded for export markets. Rum exported to the United States must include bottle markings, including markings to protect women about the dangers of alcohol to an unborn fetus. The bottle labels often tell us how long the rum was aged. *Crown* markets 2-year-old rum, *Banana* marks 4- and 12-year-old rums, *Muscat* Cacha 3-, 5- and 7-year-old rums. Some are simply identified as "old rum" or "new-old." *Muscat Guy* *Donna Old* is actually a blend of 7-, 8-, and 10-year-old varieties of *Muscat* Guy rum. Rum is also identified as white, dark, light, *rubio* (dry), *aguardiente*, *industrial*, *traditional*, *spiced*, *upped*, and *premium*.

Rum bottle labels overflow with illustrations. Among the most common images are the varieties of rums. For example, *Granada* is depicted as varieties of *Wendell*, *Clarito e Cruz*, and *Jack Pew*. *Banana* is depicted as *Muscat* Guy and *Chaliquet*. *Pine Island* rum bottle labels depict St. Kitts and Nevis. *Banana* depicts *Wendell*, *Clarito*, and varieties of *Pine Island*. *Revolut* depicts *Martinez*. National flags, stars, seals, and symbols

of material history are also frequently deployed. The bottle label for *Antigua's English* Martell rum includes an image of St. John's Harbour. *Almendra Chelá* a trademark in the famous Caribbeña rumer that also says Havana's Caribbeño de Real Fama. But St. Louis, overlooking Manzanillo Bay is illustrated on St. Martin Special Rum.

Caribbean rum bottle labels also express a sense of plantation life. *Three Arwaters*, *Arrows*, *Deputy*, *Deuce*, *Disfranchise* all include images of the plantation and their derivatives. This pattern was pronounced on the bottle labels of agricole rums of the French Caribbean. *Almendra* agricole, unlike others industrial, is distinguished by its plantation of sugar. Thus, like was traditionally bottle labels, which narrate entire vineyards and distilleries, showcasing because its particular estate identity. For rumer reviews, Appleton estate serves one of the few United-Canadian rum distillers to highlight the plantation examples. Rum-makers often place an additional label on the backside of these bottles in order to provide information about the distillery's history. "The Legend of Mount Gay" can be found on the back of some *Almendra Gay* bottles.

Generalized images of sugar plantation life are also common Caribbean rum bottle label themes. For example, one brand of Ocean Vapors island rum and one brand of *Sherry's Barbados rum* highlight windmills. This rum production is celebrated on nearly every rum bottle label, including variations of *OldJoni*, *Myers*, *Barbados Gold*, *Demolition*, and *Caribbea*. Sugar estates also a popular image on rum bottle labels. Some rum makers prefer symbols that seem to look back to the old glory days of simple plantation life. For example, some estates are depicted on rum bottle labels in scenes of *Forêt*, *La Moure*, *Payson*, and *Charles*. *Sherry's* rum distillers people filling a lighter boat with rum casks.

Rum labels embrace symbols of masculinity. *Prison* when *OldJoni*, *Captain*, *Almendra*, *Barbados*, and *Caribbea Special* rum. *Maritime* landscape create a sense of the rugged and independent seafaring life. Sealing ships prove numerous of *Myers* and

*Minchella*, *El Dorado*, and *Bounty*. Two sailors lean on a cask of rum on the label of *Crane III*. *Power* shows missionaries the traditions of rum sellers at the British Royal Navy. *Bounty* and *Captain Bligh* honor the names of the century-catch ship *Captain Bligh*, *Grand Commerce*, and *Cavalier*. Multiple labels are adorned with images of independent nondrinkling gentlemen from a more adventurous time. Some masculine images are less explicit. The work on variations of Caribbean rum expresses a sense of strength and conquest. Adventure scenes more especially common on French-Caribbean rum bottle labels, including variations of *St. Martin*, *Spiced Rhum*, *Le Mouze*, *Saint Eustache*, *Blonde*, as well as *Fine Rhum* of *St. Louis*. Early twentieth-century rum advertisements portray women, the “new” Caribbean women. Modern advertising campaigns continue to hawk sexual images. For example, the earliest version of *Captain Morgan* introduces a new “Margarita” each month.

Caribbean rum bottle labels often embrace the concept of exoticism of overhauled women because a racist era. Tropical scenes dominate some rum bottle labels, which are marketed to a white to tropical palate. Recent rum from *St. Vincent* and variation of *El Dorado* and *Macha colchery* palm trees, warm wooden and sandy beaches. Rum companies give away tropical-Caribbean vacations and sports-related items, volleyball tournaments, and windsurfing competitions.

Some images are more difficult to explain. The label of *Captain Bligh* rum depicts breakfast. Although Bligh named the breakfast for the Caribbean it seems odd that breakfast should be celebrated as a bottle of alcohol made from sugar cane. *Viceroy of Dorset* is rum brought to the States, not active in Barbados. Although there are no sails in *Bonanza*, *Geology* rum illustrates a sail featuring a sail of rum.

Some brands have adapted less conventional labels like those found on fine European cognac and brandy bottles. Family scenes resembling those on European cognac and brandy bottle labels are especially common on variation of Spanish Caribbean rum,



including Bacardi, Ron Llave, and Bayley. Bacardi and Bayley have exemplify this model. Both display national origin – plantation work – women as tropical exotica. Instead Bacardi and Bayley can display international exotica, F and H respectively. They have concluded that Caribbean rum must refer to produce themselves as universal alcoholic beverages.

### Conclusion

In the nineteenth and twentieth centuries, rum making took on increasing economic importance. The abolition of the slave trade, the emancipation of Caribbean slaves, and falling sugar prices reduced the profitability of sugar making and inspired Caribbean planters to produce greater quantities of rum. Rum makers in the French-Caribbean benefited from the nineteenth-century innovation of Cointreau, developed in the nineteenth century and the use of protective policies in the twentieth century. In the Spanish-Caribbean, expansion of sugar making and the rise of a protected U.S. market fueled the growth of Spanish Caribbean rum production.

Since the nineteenth century, rum making has helped to foster Caribbean economic and cultural Atlantic trade. However, people of the Caribbean have also been the largest perpetrators/consumers of rum. While we have captured the economic importance of rum in the Caribbean, the drinking patterns of colonists shed light on the social and behavioral impacts of alcohol use in the region. Drinking patterns in the Caribbean reflect the transfer of Old World cultural beliefs about alcohol to the Caribbean and fighting for the shared social and spiritual beliefs of Africans, Europeans, and Caribbean Indians. In addition, alcohol was helped colonists express ethnic identity, defuse social tensions, and escape the many hardships encountered in the Caribbean frontier. Beginning with an analysis of traditional drinking patterns in India, the following section explores patterns of alcohol use in the Caribbean, which provides a social context for understanding a historical understanding of alcohol in Barbados.

## CHAPTER 4 SLAVES AND THE AFRICAN TRADE

By the end of the seventeenth century, Europeans to possessing the West and West Central African slave and commodities trades. There was added to the wide range of indigenous alcoholic beverages and European trade goods already available to African consumers. In the eighteenth century, African imports of rum grew and often replaced other foreign alcohol, especially as rum came under British and Portuguese control. The social and sacred importance of alcoholic African rituals intensified and rum was quickly absorbed into pre-existing alcohol-based rituals. The fact that rum was a product of African slave labor in the Americas probably accounted for symbolic value. The rum trade to Africa expanded throughout the slavery period and although rum never became the sole article of trade, it played a crucial role as gift groups and as a secondary item of exchange.

The European alcohol trade to West and West Central Africa emerged in the early years of European expansion in the Age of Discovery. Portuguese explorers sailed down the west coast of Africa in search of King Senegal (Prestre John), a potential ally in the western-Christian struggle against Islam (Davis 1995 II: 128-133, Thornton 1992: 38). They found gold, ivory and a series of islands off the African coast, which were used for sugar cultivation. By the 1550s, Portuguese settlers, including Indian merchants, began developing sugar industries in the Azores, Cape Verde islands (Madera, and São Tomé) (Pernandino Antonio 1982). Portuguese traders introduced Africans European wine and brandy, which were purchased in coastal sales and exchanged for a variety of trade goods. The demand for European wine and brandy was strong, especially among African elites who valued the novelty of foreign alcoholic beverages (Thornton 1982: 122). By the early 1700s, when French-Madagas had passed from to the Senegal region and capteurs were there

Portugal was popular at Elmina on the Gold Coast (Fernandes 1586-1588 [6], West 1977:73). The use of sugar plantations in the Atlantic Islands, and later Brazil, increased the need for slaves and augmented the value of the Portuguese-slaved trade.

In the seventeenth century, new legions to challenge the dominance of European wine and brandy. Dutch winegrowers may have introduced the first shipments of wine to West Central Africa. In 1580, Portugal came under Spanish rule and, as a result, Portugal became an enemy of the Dutch who were fighting for independence from Spain. Dutch traders (including, after 1622, those from the Dutch West India Company) succeeded on the African slave market illegally shipped slaves to Brazil. The Dutch also provided capital to Brazil and became influential in the Brazilian sugar trade. According to Dutch Caribbean historian Johannes Postma (1996:143) in 1622, there were 29 sugar refineries in Holland processing great amounts of Brazilian sugar. During the last decades of the Eighty Year War (1567-1648) between Spain and the United Provinces, Dutch forces captured the important sugar-making province of Pernambuco in northeast Brazil. They held the province from 1630 to 1654 and provided substantial resources to sugar-making Brazil (1996:chapter IV). The Dutch also ousted the Portuguese from the slave-trading regions of Elmina, on the Gold Coast, and Luanda, Angola's colonial capital. Both areas were major departure points for Brazilian slaves. Dutch colonies built a flourishing slave market at Luanda and they have exported the first substantial quantities of Brazilian slaves.

The Dutch conquest had positive repercussions for the Brazilian economy. According to historian José Gesteira (1996:143-151), the Dutch conquest of Luanda in 1641 ended the Portuguese merchants' domination of the African-slaved trade. In 1648, a Brazilian expeditionary fleet occupied Angola from the Dutch, which allowed Brazilian merchants and traders to set up strong commercial houses in Luanda and break the former Portuguese monopoly. They immediately developed markets for Brazilian-made goods, such as rum and tobacco. Brazilian rum was simply inserted into the wine and brandy gap, which opened during the Portuguese-Dutch conflict.

Wine and brandy, however, were central to the Portuguese economy. They were widely consumed in the metropole and exported to markets in Europe and the Americas (Lisnard 1711-89) (Hawcock 1998). In the seventeenth century, Portuguese wine and brandy attracted domestic protection, especially as the business African clerical trade. In 1678, Governor Antonio de Saldanha de Mascarenhas Sousa, the highest-ranking government official in Angola, wrote to Pedro II of Portugal asking for a ban on Brazilian wine imports. Mascarenhas Sousa adopted a business argument, but Brazilian wine was threatened to the benefit of Africa, Indo-Africa, and Europe in Lusania and its importation should be prohibited. The order was instituted the following year. However, a strong African demand for Brazilian wine had already developed so it, as a result, a prosperous wine smuggling trade emerged between Brazilian traders and Lusitanian merchants. According to Costa, the illicit trade became so profitable that even Portuguese wine and brandy traders – the force behind the initial prohibition, entered the illegal Brazilian wine trade. The inability of Lusitanian officials to enforce the ban led to its repeal in 1694 (Costa 1996:156-174). The ban on Brazilian wine in Portuguese wine and brandy markets was real. In 1695, only 4 years after the repeal of the ban, Portuguese wine and brandy represented less than 7% of the total clerical trade at Lusania, while Brazilian wine accounted for the remaining 93% (Costa 1996:182). According to Costa (1996:182): “By the start of the 1800s, Brazilian had already long supplanted the Demara wine.”

The French who principally employed wine and brandy in the early years of French trade with Africa. The first recorded voyage of the French triangular trade in 1645 carried French brandy to the African coast in exchange for slaves (Crosby 1987:10). By the end of the seventeenth century, however, British Caribbean non-branching the French slave trade. In 1699, French slave trader Jean Barbot wrote:

*Among their voyages to the Cape Verde I had a party back, trade for slaves and gold, but my profits fell far from those after I brought great quantities of the French brandy, which I had always a good quantity on board, being much less demanded by nature, a great quantity of spirits and rum had been brought on deck*

coast by many English trading ships, then on the coast, which obliged all to sell cheap.

(Slade 1796:171)

In the late seventeenth century, French Caribbean colonizers, attempting to circumvent the Royal Africa Company's slave trading monopoly, probably accelerated the first appearance of British Caribbean men into West Africa (Coughley 1981:103, Ellis 1988:127, McClenahan 1979:493). In an effort to curb the antislavery trade, the Royal Africa Company proposed, but never implemented, a plan to establish men producing plantations on the West African coast (Coughley 1981:106, 107). In fact, the British Caribbean planter lobby successfully prevented the rise of competing industries, including rum making, in West Africa (Macgregor 1709: Anonymous 1711).

The demand for rum in Africa was high and the Royal Africa Company was soon forced to adopt the antislavery practice of radiating rum to their cargoes. In 1700, London officials for the Royal Africa Company wrote to their agents in Ghana and Sierra Leone advising them that a small ship was bringing rum from Barbados and, if the venture was successful, it would become standard provision for the colony (1700-1701). By the early eighteenth century, the ruling Royal Africa Company had lost its monopoly control of the African slave trade, which opened the way for even greater direct trade between the British Caribbean and Africa, especially the Gold Coast (Ellis and Rothemann 1997). By 1700 (1702-70, 80-86; Sklar 1974:144), in the late seventeenth and early eighteenth centuries an annual average of between 5,000 and 10,000 gallons of rum reached West Africa (Ellis 2000:101; Sklar 1974:144).

Historian David Eltis and Laurence Johnston (1982) estimated pre-colonial Africa's role in the emerging Atlantic economy and argued that, before the 1600s, "the value of slaves exported did not exceed the value of commodity exports." Gold, ivory, and precious hardwoods remained central export commodities until the full-scale rise of American plantation slavery. At the peak of the African slave trade in the 1780s, slaves represented 50% of the value of the African export trade.

The modern western perception of alcohol as a poison/balancer often instrumentalized to simplify the ambivalence of European slave trading. For example, according to Cuban historian Fernando Ortiz (1945: 22), even “was always the cargo for the driver’s return trip, for with it slaves were bought, local churches looked, and the African tribes corrupted and weakened.” Historian Eric Williams wrote:

It was an essential part of the cargo of the slave ship, particularly the colored American slave ship. No slave trader could afford to do away with a cargo of rum. It was profitable to spend the time for liquor on the coast. The Negro Indians were glad to drink, more inclined to trade with they had their rumon, and thus the European was much

(Williams 1994: 90)

Carter (1996: 138) also argued that alcohol was “a stimulant to increase the already powerful lure that trade goods exerted upon local slave suppliers [and] an instrument to render the burgeoning regulations of the latter less effective.” Modern attitudes about the culpability of alcohol for slavery have helped magnify the role of the slave trade, that the reality of rum’s past role tends to be more murky than the images so persuasively depicted. West and West-Indian Africans were familiar with the potentially disastrous effects of excessive alcohol use prior to European intervention, which precluded the type of social disorientation that accompanied the alcohol trade in Native American groups in North America.

Rum and other alcoholic beverages clearly played an important role in the African slave trade. English slave trader John Adams (cited in Ortiz, “Waters and Wine,” 1994: 28) described the specific demands at different trading regions, but believed alcohol was “everywhere called for.” African historian Lynn Paul (1973: 7) argued that the only exception to the alcohol-for-slaves model was in the northern stretches of the slave trade where Islam was strongly intertwined. For example, Muslim controlled areas, alcohol was not the alcohol trade was strong. For example, in the early nineteenth century Portuguese traveler Valentim Fernandes (c. 1564–1574–1717) described the availability of numerous types of locally made wine in the Senegal region, including wine made from honey, guava, and palm sap. According to Fernandes, the Wolofs, a partially Muslim group from the Senegal region, “are drunkards who derive great pleasure from our wine.” Indeed

(1746) Xikole (now) welcomed aboard as among the Wolof's and believed may have only received Muslims who "pretend" to follow Islam.

Much of the interest introduced into the African trade centered in the context of gift giving. European slave markets were expected to provide a rich source for Europeans all those involved in the trading system. Adams wrote,

The Success of a Voyage depends first, on the well meeting, and on the well knowing of a Cargo. Secondly on a Knowledge of the places of Trade, when, and how much may be expected to be sold there. Thirdly, in obtaining well made English Goods, and conforming to the Humours of the Negroes.

(Williamstall in Chinn, Walvin, and Wright 1976: 24)

Slave trader William Boucher's guidelines for the Dutch West India Company included regulations that the ship's captain make daily presentations of beauty to the King and the principal leaders listed in Pretoria 1740: 303. The Dutch may have been willing for what many European traders considered a "disagreeable and troublesome custom." According to Burke:

Their design at first was only to draw off the Blacks from trading with Portuguese; but those having once tasted the sweet, could never be broke of it, then the Portuguese were usually supplied from all the places of trade they had been possessed of on the coast; but it became an insupportable custom for all Europeans.

(Burke 1746: 260)

October, slavery, and May became standard times along the African coast for gifts of alcohol-disposed prior to trading (Chinn 1723 cited in Chinn, Walvin, and Wright 1976: 32; Burke 1746: 143; Rodney 1770: 183). According to Adams (1723 cited in Chinn, Walvin, and Wright 1976: 32) the African leader "never comes in without dry Legs"<sup>107</sup>. Boucher (1735-40a cited in Burke 1746: 301-302) reported that the Africans at "Wylah" were gratefulness of strong liquor and requested their slaver: "Masters! 'tis that Intends to Trade here must furnish them better, or he shall not get one Truth [elephant tusk]." However John Thornton (1792: 64-67) argued that the practice of gift giving, which often involved alcoholic wine, was implemented to appease main leaders and integrate more peripheral African social groups into the Atlantic trade.

Brown and other alcoholic beverages also entered Africa as part of larger trading packages. In the 1880s, alcohol represented as much as 70% of West African imports and a primary international market (Table 8.1). This secondary use of alcohol is evident among all independent trading networks. For example, Aklon (1855) used in Congo, Wilens, and Wright (1876–189) purchased a slave woman on the Garden River for “9 gallons of brandy & one liter, 2 small guns, 1 bag of powder, 2 strings of gunnys beads, and 1 paper cloth.” The 9-gallons of brandy represented 23% of the total cost.

Table 8.1. The relative distribution of imports to western Africa in the 1880s and 1890s.

Goods	1880s	1890s
Textiles	48.0	46.4
Alcohol	42.3	9.7
Tobacco	3.3	8.0
Misc. manufactures	13.8	10.9
Iron	3.0	3.3
Food	9.0	1.8
Gun & gunpowder	7.8	8.6
Rare minerals	3.0	1.3

Source: Eltis and Jennings 1988.

Portuguese traders followed a similar pattern. An account from an independently running Portuguese trading venture shows that African purchases of brandy represented about 4% of the total price of one young healthy male slave at Beira (Figure 8.1). Thus, the cost of a young healthy male slave in Beira was equal to about 40 gallons of brandy and the transaction highlights the necessity of goods used in the purchase (Ribeiro 1969:20–211, 223–227).

In the 1720s, brandy was imported as because the principal commodities imported by the French at the slave trading port of Whydah (Law 1681–1802). Analysis of six French slave trading voyages in 1742 revealed that brandy represented 7.3–16.3% of the value of these cargoes, and averaged 12.4% (Daguerre 1989:207). However, by the mid-eighteenth century, French Caribbean cane entered the French slave trade as a substantial question. The African demand for rum helped weaken the French ban against rum imports and, after 1732, rum could legally be re-exported to Africa via French ports. Nantes, La Rochelle, and Bordeaux benefited from the increased availability of alcohol for the African trade



Although it is not clear how much French-Canadian men visited Africa, French historian Eric Saegert (1991: 248) estimated that, in the period between 1741 and 1778, alcohol represented about 19% of the total value of merchandise exported to Africa from Bordeaux.

Figure A.1. Portuguese trading systems in Africa in the eighteenth century

Top ten most valued items in Senegal	
1	piece powder in a Commode
1	piece Commode
12	piece red fabric
3	piece of lead
3	piece with wrapped handles
1	Indian cloth of 11 yds. with attractive flowers
12	yd. of coarse muslin with stripes or spots
12	yd. kasabian or -claring glass beads in bags, attractive colors
3	the lead cloth
3	piece Indian fabric
4	pieces
4	pieces
10	pieces of red, as white and blue as possible
15	yards of muslin
1	coat for 14-15 lbs
4	piece fabric
L.L.L.B. muscade	

Source: Ryngaert 1993:108

Dutch slave trade records reveal a similar strategy of alcohol trading. Voyages conducted by the *Quana* (1709) and *Clara* (1712) – two ships of the Dutch West India Company trading on the Slave Coast, indicate that alcohol purchased about 25% of their slave cargo (Ponson 1993:104). Documents of the *Middelburgsche Compagnie* (MCC) also highlight the customary role of alcohol in the Dutch slave trade. According to W. B. Unger's analysis (cited in Ponson 1993:104) of the Company's nineteenth-century-trade records, “77 percent of trade goods consisted of textiles, 9 percent were guns and 14 percent gun powder (slightly more than 10 percent consisted of alcoholic beverages, and a previous 5 percent could be categorized as costly luxury items or novelties.” There is some indication, however, that the role of alcohol in the MCC trade was increasing in the late eighteenth century (Ponson 1993:104).

Much less information about the new trading Africa from the thirteen colonial empires. For example, Williams (1944:83) argued, “The new trade on the slave coast

known a virtual monopoly of New England.” (L.R. Johnson et al’s 1794 *Statistical and analytical survey of the New England trade with extended view, in 1770, four fifths of New England exports went to Africa for a total of nearly 300,000 pounds* (Pur 1978 p. Williams 1944-93). John McCusker also estimated that the continental colonies annually exported a little more than 300,000 pounds of goods to Africa during the height of the continental war trade strike-out of the Seven Years’ War and in the period 1764-1773. However, McCusker showed that only 30% of continental war exports went to Africa, not five fifths. Further, McCusker argued that continental traders were responsible for only about 4% of the total slave trade, and less than 2% of British slave purchases in the period 1764-1773 (McCusker 1989-93-957).

Yet, while the degree to which the economic activities were involved in the slave trade was small, the proportion of men used by continental traders in slave purchases was relatively high. Slaves was only one of a variety of goods used by European slave traders, but the primary commodity of New England traders. In 1773, the *Return from the Commissioners for Trade and Plantations* ‘(SC 1777) disclosed that slaves from Boston and Rhode Island purchased 2,231 slaves on the Gold Coast “with New England East India” Rhode Island slave traders went especially heavily on men. According to Caughey (1961 34-37), “Slaves completely overwhelmed a very often men on the cargo manifests of Rhode Island ships. They were called ‘men men’ with confidence. Even, in fact, accounted for 70-75 percent of total cargo valuations.” The New Englanders, however, could not compete with European slave traders who sent direct trading packages loaded with highly sought-after goods acquired from their overseas colonies, especially India. Furthermore, New England slave traders, therefore, posed only a limited threat to the well-stocked European slavers.

The constant exports of New England men to West Africa mostly competed with British-Caribbean shippers whose region also received largely of men, one of the few commodities they had to offer. Furthermore, they frequently competed in Port-au-Prince,

about the high price of Royal African Company slaves and, as a result, became heavily involved in the slave trade trade along the West African coast (Cottonson of Barbados 1705; Cottonson of Barbados 1711). The small east and West Indies Caribbean groups, especially after the demise of the Royal African Company's monopoly, descended upon the West African coast loaded with rum (Jiles and Richardson 1970: 18). For example, in the early eighteenth century, Sir William Cottonson regularly shipped the rum produced on his plantations in Barbados and Antigua directly to the Gold Coast for the *Asiento* (1705, 1711-44).

Why was alcohol so much high demand on the African trade? An examination of alcohol use among the Akan, Igbo, Kongo, and Aja-Fon (the people who French slave traders referred to as Anini) highlights the social and spiritual significance of alcohol in the African trade and helps explain African demand for alcohol, explaining alcohol use among these African groups provides a foundation for understanding African slave trading on the Brazilian and French Caribbean, which is discussed in the following chapter. The Akan and Igbo were central to the British transatlantic slave trade while the Kongo and Aja-Fon Anini were the most significant in the case of the French.

The success of early explorers, traders, and missionaries on West and West Central Africa led to the popularity of indigenous alcoholic beverages prior to the expansion of the transatlantic slave trade in the late seventeenth century. Late ethnographic fieldwork, those reports detailed the production of alcoholic beverages from various local sources, including honey, plantain, and various species of yucca (de Meuron 1682; Fernandez 1694-1708; Pigafetta 1594; Bontour 1622). Palm wine, produced from the regular variety of palm, appears to have been one of the most ubiquitous drinks found along the West and West Central African coasts.

Alcohol production using local plants in Akan and Igbo societies provided European slave traders and the rest of the transatlantic slave trade. As early as the eleventh century, Al Fakr al Dihawi referred to "fermenting alcohol" served to the king of the

central kingdom of Ghana (just after Piri 1713:28-31). Dried melons collected in the late seventeenth century are more along history of palm wine use in the Gold Coast diaspora. In the Asante's initial migration into the region in the early nineteenth century (listed as Akyempong, 1991:27), Poles were not only available in high levels prior to the nineteenth century. In 1489, trader James White joined his brother (1758:19) wrote that, in the flight of Bofra, "there was a great store of palm wine, out of which they gather great store of wine." In the mid-seventeenth century, Dutch trader (listed as Jones 1785:34) noted the main village just north the mouth of the New-Canaan River "Wynaburg" due to the large amounts of palm wine produced there.

Alcohol use among the Kings of West Central Africa and Age Piri of the Slave Coast also produced the use of the fermented drink locally. For example, in 1570 Portuguese missionary Ballaure Affonso noted that the people of Luanda drank wine a beer made from fermented grain, and, in 1648 Portuguese missionary Jose Francisco de Bove described beer brewed from flour among the Kongo (Curtis 1996:37-38). Palm wine was also present. Portuguese missionary Filipeo Pignatelli (1594) wrote that, in Luanda, "palm ... grows here from which oil, wine, vinegar, fruits, and bread are all extracted." Other local beer names were called *pinha* and palm wine was also popular among the Asante (Baker 1746:128, West 1742:122). According to Brown (1768:39), there were many types of grain at "Wynaburg" including "the great Mallico" which the asante don't make bread of it, but use it in the brewing of beer." Baker (1746:128-129) also wrote that the people of Wynaburg brewed two types of beer (beer "large drink, or Indian wheat" Asante women played a central role in beer brewing (Baker 1746:331; Brown 1768:39). Palm wine was less common in the Slave Coast, but slave trader (listed as Ruffin 1742:317) described the availability of "Two types of wine palm wine, namely wine de palm and wine de Bofra."

For a given specific supplemental grain based beer and palm wine. African natural exported alcoholic beverages for their own use, especially distilled spirits, which were

much more concentrated, or "hot," than the usual fermented drinks. African states also raised foreign alcohol as a way to confirm status. For example, in Nkyideh, Senegal (1705-65), alcohol "The Kacker Beer" perfumed breads. The extent of the European trade, however, made foreign alcoholic beverages widely available and Senegal (1705-65) believed that imported breads along was "the most Year of all Progress."

Some parts of West and West-Central Africa experienced restrictions that others. Obviously those areas of West and West-Central Africa with the greatest amount of direct trade with non-Indian regions, such as Angola and the Gold Coast, had greater access to competitive rates. Ellis (2000:50) estimated that, in the late seventeenth and early eighteenth centuries, the Gold Coast, which carried on a considerable export of direct trade with non-Indian like with African traders, received 40,000 gallons of rum annually.

Historian Joseph Miller (1988: 677) argued that Europe and America "dumped surplus products in Africa (including rum) too much for the taste of the African towns." Rum was a key product, but it should not be overestimated as an unscrupulous supplier as it is often by the British and French trading societies throughout the Atlantic world. Part of its appeal was that it was less expensive than wine and brandy purchased from French and Dutch slave traders (Ellis 2000:50, Miller 1988:77). Moreover, African traders may have also used their desire for rum to officially express allegiance to Portugal, the Irish Americans, or British traders. In addition, rum probably helped reduce the price of wine, gin, and brandy brought by European traders.

The success of the African alcohol trade was enhanced by a growing African social structure that embraced alcoholism. Foreign spirits were integrated into traditional West and West-Central African cultural festivals, such as the Igbo year festival, Akwa Ibom festival, and Oshun festival (Adeniyi 1997: 63-4). (Bosman 1705:128-129; Reid 1973:32-34, 41-54; Scott 1988: 47). More important, however, was alcohol's unique ability to facilitate communication with the spiritual world. The physical and spiritual worlds are closely aligned in Akan, Igbo, Kongo, and Aja. For religious as well

in the religious of many other West and West-Central African groups. Ancestors' spirits and deities played an active role in the daily lives of the living. According to Thornton (1997:134-135), through rituals and divination, the spiritual world regularly left their God-guided believers through life. The physiological effect of alcohol, as with sleep deprivation, fasting, and other ritual abstinence activities, was a medium that helped enhance interaction with the spiritual world. Hounsome-Gonzalez-Akpanangbo (1997:11) argued that the Akwa considered alcohol a sacred fluid that "bridged the gap between the physical and spiritual worlds." According to Akpanangbo,

Acts of passage depicted the transition of life as a progression from the spirit world, through the living world, and back into the spiritual world. Marriage, puberty, marriage, and funeral ceremonies represented different spiritual stages in life's journey. The human perception of the value or intensity of the spiritual and living worlds sustained with each phase was reflected in a measured or profuse use of alcohol.

(Akpanangbo, 1997:10)

Alcohol, therefore, helped link the physical and spiritual worlds ensuring the current progression of life for the individual and community.

Libations highlighted the way alcohol united the physical and spiritual worlds.

Libations are best described as prayer accompanied and punctuated by the pouring of alcohol (Akpanangbo, 1997:104). Individuals, families, and state poured libations to seek benevolent ancestral spirits and deities. Libations protected the community from evil, propitiated angry spirits, and appeased an individual's conscience from libation. Libations, therefore, created a path to a spiritual world that helped secure community needs.

The Akwa poured libations and made alcohol offerings to ancestors, spirits, and deities before most ceremonies (Barbot (1946:114). Brown (1920:111), in 1920, drew notes from de Mureau (1903:41-42) described an Akwa drinking ceremony where the first drops of palm wine were poured on the ground as sacrifices for the ancestors. If the participants had "harder" food in their arms and feet, they would spit the first handful of palm wine on them. Fasting made increased the possibility that they would not be allowed to drink together as guests. Barbot (1946:125) recorded the most necessary libation ceremony

time. That of the most powerful Akan spiritual symbols is the ancestral stool – a sacred representation of a deceased relative. Several times a year the Akan brought out their ancestral stools and placed food and alcohol offerings on them followed by the pouring of alcohol libations. In return, the living received ancestral blessings (Akyempong 1997: 40; Barrow 1746:301). The Igbo also poured alcohol libations and made ritualized offerings of alcohol to their ancestors and deities in public and private ceremonies. Barrow (1746:302) wrote of them “never drink without spilling a little of the liquor on the ground, for he said:” The Igbo ate much like the Akan did, represented an ancestral spirit. According to anthropologist Geoffrey Parrinder (1961: 136), the Igbo periodically poured alcohol libations over the *efe* (ankle) in the hope of appeasing ancestral spirits and receiving ancestral blessings in worldly endeavors. In the twentieth century, anthropologist George Schudson (1968: 230-23) recorded that the Igbo set up an *ogwu* in their households for their *abasi* [*egbo*], which commemorated departed relatives. These became sacred representations of ancestral spirits only after libations were poured.

Similar practices existed among the Ashanti and Ewe. For example, Barrow (1750: 269) and also Barrow (1746:302-334) wrote that worshipping in the serpent cult at Wipshah continuously left “black offerings at the snake house.” In the nineteenth century, British colonial administrators – recognizing the importance of alcohol in the serpent cult at Wipshah – actually visited the “Snake house” and left offerings of rum to the priest (R.P. Burton 1864:165). Anthropologist Melville Herskovits (1964: 27) noted that, in Dahomey, in the 1930s, rum continued to be the proper sacrificial offering for a *vodun* (deity). In West Central Africa, according to Miller (1981: 15), alcohol was central to the slave trade because of “intensified communication with the spiritual component of power.” In 1702, Portuguese missionary Laurent de Laques wrote that the missionaries of Kongo “do nothing but drink.” But anthropologist George Schudson (1968: 244) believed Laques misunderstood the importance of drinking among the Kongoleses and argued, instead, that “social necessity required more than the pursuit of alcoholic stimulation; multiple [other] needs were required

on many occasions (especially at) rituals and ceremonies honoring the ancestors. According to tradition, what Lacques best remembered was the important role of pine trees in spring communications with ancestors prior to the huge harvest ceremony. In the late nineteenth and early twentieth centuries, Lacques (Karl Lacques wrote,

Here and there are still finds special houses for the safe-keeping of the pine-rod-like and ancestral images. One such house across small wet-land situated between which there is only one way, into which one goes barefoot when first it is notified that the ancestors

(Lacques 1911:133)

In pre-colonial Akas and Igbos societies, birth representations were inextricably linked to the spirit world. The ancestral transition required the assistance of a powerful and sacred fluid. For example, newborns was often given rice to eat but no hot porridge/beans after the long journey from the spirit world. "The gesture [of giving rice] was an expression of welcome, an attempt to the newborn to try to stay with us earthly family." According to Akyeampong (1997: 31-32), an Akas child was believed to have two mothers: an earth mother and a spirit mother. After that the spirit mother would exclusively child produced the 9-day newborn-on earth; during which time rice was offered to appease the spirit mother. Anthropologist A. B. Ekke wrote,

The [Akas] child is then brought out and handed to the father, who carries him to the nursery house and then gives him several sips of [milk] from a gourd and set the day's rice given to him, together with the same amount of rice from his mother to the child. Thus, after the second sips of rice, the rice was poured as a libation to the ancestors and the day ended with his ritual.

(Ekke 1937 cited in Akyeampong 1997: 32)

Akyeampong pointed out that this ceremony did not occur when the child was conceived or being, person confirming the link between ancestors and deities. The light also connected newborn children and the ancestral world. In fact, a newborn represents the uncontained spirit of uncontained reference and the light performed special libation based ceremonies to domesticate the particular ancestral spirit (Singh 1974:45-46). As a gateway to the ancestral spirit, gifts of pine were most given to newborn libations. The naming ceremony was followed and, according to Douglas (1960:146), it "is a time of great



ingesting and drinking and large quantities of palm wine are consumed in celebrating the occasion.”<sup>24</sup>

Special alcohol-based ceremonies occurred at birth events in the Kongo.

According to Lamine (1971: 10–11), pregnancy, childbirth, and nursing were critical stages in Kongo-born child’s life and, therefore, required elaborate rituals involving the use of alcohol. New fathers were expected to spend liberally and provide plenty of palm wine for the feast that followed his child’s naming ceremony. Moreover, alcohol spirits were needed to sing children’s affirming statements with alcohol. According to Lamine,

“When the godson and child have been blessed, all in the house who have not given birth to children or consumed themselves to some extent (quite) must go out. There big celebrations with palm wine are called for, so that everyone stays drunk according to his ability formula.

(Lamine 1971: 112)

Marriage cemented bonds between families, clans, and lineages. The act, therefore, required the use of alcohol to seal spiritual approval and ancestral guidance. Some leaders (Bates (1966: 239–240), de Meuron (1932: 39–41), and Boussa (1933: 198–199)) all noted the important role of alcohol at Akan weddings. The ceremony itself took the Akan word for palm wine, *awa*, and was simply “the exchange of drinks in the presence of witnesses and the pouring of libations to the gods and ancestors” (Akyeampong 1997: 26). The use of alcohol in marriage ceremonies continued into the nineteenth century when the increasing role of women in the market economy of the Gold Coast put a premium on brides and led to the economic collapse of bride price known as “bride rust” (Akyeampong 1997: 27). Among the Igbo, once a man selected the woman he wished to marry, he proceeded to his family’s home and offered a small gift of a bottle of gin or a pot of palm wine to begin negotiations (Bridges 1966: 69). Bride price often included quantities of alcohol and wedding ceremonies included of course, consumption of drink (Bridges 1966: 71, Pineda 1962: 106).

In the High of Boma, Boussa (1933: 44) wrote, marriage was a simple ceremony whereby the bridegroom united his new relations with “virtuous and drunk.” As Wiyab

Barker (1946:348) reported that no actual ceremony took place and that a ceremony was simply concluded when the bridegroom presented the parents of the bride with eight or ten pairs of beer. In West-Central Africa, Larsson de Looze (quoted in Oates 1986:73-94) wrote, "[p]ale-water was consumed to successfully conclude any matrimonial transaction."<sup>2</sup> According to Bangs scholar John Jensen (1992:57), in the Lamelë wedding cult of Loango "where husband and wife maintain meetings in the Lamelë-house; the man does a large copper ring, and the woman a smaller one, the ceremony commenced with a drink of water." Larsson (1957:B.17) made numerous references to the use of pale-water in Bangs marriage ceremonies and noted that even the ancestors received their share:

Death marked the end of physical life and a return to the spirit-world. Agnes alcohol was central to this transformation. Proper libation and libationists initiated good amounts of alcohol, which helped ensure the successful transition of the deceased to the spirit world. Offerings of alcohol also guaranteed the future sustenance of the deceased and prosperity for the family and community left behind. For example, the Adam, according to de Blagenc (1982:134), just food and drink on the grave of the deceased believing that the dead "live on it, and [dead] part of water and pale-water are constantly renewed." Barker noted that in the Gold Coast

As, soon as the corpse is laid down upon the grave, the persons who attended the funeral drink pale-water, or rum plentifully out of water horns, and when they cannot drink off at a draught, they spit on the grave of their deceased friend; that he may have his share of the liquor.

(Barker 1946:285 see also Fiala 1937:196-205 and Percheron 1960:105)

Klyenqung noted that alcohol was not poured down the throat of someone who was dying but for that it would expedite their journey to the ancestral world. However, once the individual was deceased, alcohol libations helped the deceased's transition to the spiritual world. The Igbo also made copious use of alcohol at funerals. According to Bunker (1966:121-26) alcohol was sprinkled on the deceased prior to burial. During the important second burial feast, "lots of gin and an unlimited supply of pale-water [were] consumed." Anthropologist Frances Arnold (1979:27-32) also noted that the Igbo rarely

offerings of alcohol to their ancestors or Federal servants so that the ancestral spirits would welcome the newly departed soul.

In "the city of Benin" Bosman (1703: 448) observed, "partick evening commonly lasteth seven days, ... during which they drink very plentifully." At Whydah much rum is distributed for Freezing, and all night there is dancing, firing, and dancing (Froben 1821: 49). In the 1930s, Hordowski (1934) detailed the role of alcohol and its ability to open lines of communication with the ancestral world of forest wiles in Deloréy. In West Central Africa, in the five nineteenth and early twentieth century, the people of the Range were known to "bury their dead on the mountains in cool pleasant places ... [and] have wine and food" (Walden 1964: 281). According to Adlin (1995: 174) in the nineteenth century the linguists of "West Central Africa" made extensive use of palm wine on their travels ... pouring the wine over the graves of their interment as an attempt to soothe the dead."

Ceremonial drink also had a strong spiritual component and required the sacrifice of alcohol. As with other ceremonies, such drinks helped repair social fractures, build alliances, and strengthen community ties. For example, on the Gold Coast, Bosman noted,

When they make the oath drinking, it is usually accompanied with an expression that the female says I tell them that they do not perform the customs of their obligation. Every person entering into any obligation is obliged to drink the remaining liquor. What any person is kind to do to another of another, all the third party are obliged to drink the liquor, with an expression that these friends may punish them with death if they do not assist their wife against rape and violate their name. (Bosman 1703: 148-150, see also Barbot 1748: 212)

Bosman (1703: 286) also noted that such drinks helped establish alliances among higher warriors, provide healing, and other military expenditures.

Barbot recorded one of the most detailed accounts of oath drinking among the Anlo of Whydah, which was called *Awere Ales*.

Three persons make rather little hole in the earth, up which they lay some of their two broad dogs, and having thrusts it a little some feet north, south of these dogs of the companies, as much as he can. Then then, they look upon it as a solemn engagement, to drive him out and the same ceremony whenever any offend them.

whether good or evil, and that they are bound together to each other their most secret thoughts.

(Harter 1746,144)

Anthropologist William Stagg (1978) also described a similar custom called 'drinking the milk' which was found in communities that sought to create peace within the community. For example, a man who doubted the fidelity of his wife could have her drink the milk. The wife and husband drink the milk drink together to prove solidarity and offer the community drink along with them to show unity and support. Death was the punishment for lying. Because of its link to the spiritual world, alcohol was often a sacred ingredient in rituals. In February, anthropologist Paul Haiman (1997) cited in Stagg (1978: 136-144) mentioned the preparation of an oath drink, which was made in secret and contained, among other things, gins and the blood of a fowl.

The use of alcohol in both marriage, funeral, and oath ceremonies may reflect the need to bring the community through an intense period of spiritual intensity. These traditions were born of community stress when living and spiritual worlds were closely and precariously aligned. The purifying effect of alcohol on spirits and deities may have produced a perception of order and control that helped stabilize the community during stressful times.

Drinking together also strengthened the cohesiveness of the community. These social gatherings required the participation and economic assistance of the family, clan, and lineage. For example, in Maasai society, when Maasai women give birth,

all the people here, women boys and girls, come to her. They give the child a name upon which they have agreed, and dance around with the father and all other women – on which occasion they make a big feast, with every smoking, food, and drink, which they have.

(in Haiman 1402-14)

Continuity remains a defining characteristic of community, highlighted community ties and reaffirmed social connections. The physiologically soothing effect of alcohol helped manage alterations to social structure.

Continuing with the spatial world constructed through language and, therefore, the production of alcohol was a powerful form of social control. Titled chiefs and rulers held the land and labor necessary to produce palm wine and their authority also ensured that they would receive alcohol as the form of tribute from the community, as well as trade liquor from slave merchants and sailors. Alcohol was so important in defining power that warring groups would sometimes destroy their enemy's palm groves as their attempt to destroy the source of their enemy's spiritual power (Doris 1966: 47). Ethnographies from the Gold Coast highlight the link between alcohol and power. For example, alcohol libations and offerings secured military assistance from Akan war gods (Akosua Baidoo). According to Akpanangang, Akosua Pokuwa (the female head of a marriage) of Anomani believed Akan war gods liked the red color of *Enawonon non*.<sup>1</sup> Akpanangang argued that the war gods' preference for red rats reflected the link between warfare, blood, and alcohol. Akpanangang illustrated the connection by suggesting that the use of alcohol and bloodlibations along the Gold Coast reflected with the use of warfare during the slave trading period (Akpanangang 1997: 28; Doris 1966). Igbo-ruled chiefs also maintained their power through the control of alcohol. As with Akosua Baidoo, the Igbo war god *Ngwa* (*Owerri*)<sup>2</sup> (*he who splits the enemy's shield*), was usually evoked with alcohol libations (Doris 1966: 19–212).

The alcohol-for-slaves model developed in the early years of the Atlantic trade. By the late seventeenth century, New World rum began to replace traditional palm wine and locally exported from Europe. Rum was distributed at gift-giving ceremonies and integrated into a larger trading package. The social and sacred value of alcohol, as well as its links to power and spiritual guidance, between West and West Central African demand.

The heavy emphasis on rum in the Atlantic slave trade may, however, also reflect special appreciation for African slave-made products and symbolic respect for hostiles murdered overseas. In the 1950s, Adelaide Hemmings recorded oral histories in Gabon's

concerning the slave trading ships, included among the oral histories was a claim that the Europeans performed to their astonishment sailing east across the Atlantic:

The English must bring pigs. The Portuguese must bring powder. The Spaniards must bring the small vessels, which permit to cut the winds. The Americans must bring the rhubarb and the rum made by our Indians who cut them; for these will permit us to smell their presence.

(Henderson, 1966: 87)

By the end of the eighteenth century, Caribbean rum was being sold throughout much of the Atlantic world. It found substantial markets in Africa, North and South America, and even found acceptance among some churches in parts of northern Europe. In the Caribbean, however, rum was more than simply a economic commodity that benefited a small plantation-owning bourgeoisie. Caribbean peoples were also the largest per capita consumers of Caribbean rum. Having explored the emergence of rum in Africa, America, and various European lands and the flow of Caribbean rum throughout the Atlantic world, we now need to investigate its consumption and the meaning of rum within the rum-making societies. The following chapter explores the social, economic, and political significance of rum within the major Caribbean-rum societies. Readers will learn that rum drinking permeated all social classes in the Caribbean and acquired unique meanings within the Caribbean's diverse cultural contexts. The African demand for rum took seed in the Caribbean as West and West-Central African slaves brought with them a desire to recreate traditional patterns of alcohol use.

## CHAPTER 5 VOLATILE SPIRITS: ANCESTORS, ALCOHOL, AND AFRICAN SLAVE SPIRITUALITY

Alcohol was familiar to newly arrived Africans in the Caribbean and the symbolic meanings slaves attached to drinking reflect the continuity of African cultural beliefs. Despite occasional explicitly colonial efforts to restrict slave drinking, slaves had easy access to rum and other alcoholic beverages. The ready availability of alcohol sparked the creation of new African-oriented drinking practices, which marked levels of the lowest common denominator, overlapped the ritual and sacred alcohol-based traditions of diverse African ethnic groups. As in Africa, alcohol helped foster slave spirituality and promote group identity. The construction of new drinking styles also strengthened resistance ideologies, which challenged European efforts to suppress African customs. Understanding slave alcohol use provides a prism through which to view underlying principles that helped shape slave life.

Alcohol was widely available in Caribbean slave societies. In the 1640s, English religious Richard Ligon (1657: 27) lamented that the people of Barbados "are seldom dry or thirsty" and complained to find the vast array of alcoholic beverages typically consumed on the island. In the sugar-making colonies, rum was especially common. In 1748, Barbadian sugar planter Richard Hall (1755: 32) estimated that Barbadians drank annually 754,290 gallons of rum, 20% of the total amount produced, a per-capita consumption rate of more than 7 gallons. In 1768, Barbadian sugar planter George Fearn (1768: 134-135) also wrote that Barbadians "40,000 inhabitants consumed above 700,000 gallons of rum each year. However, some Caribbean slaves drank more than others and Hall, for example, reckoned that "20,000 are half a pint of Rum each in one day," or 22.8 gallons per year. Antislavery clerics less than their Barbadian counterparts, but they were not

supplies. In the period 1768-1772, Jamaican sugar planter Edward Long estimated that his fellow colonists consumed an annual average of 540,000 gallons of rum, 19% of the total amount produced, in addition to the amount stolen, which may have accounted for an additional 5%. Jamaica's population was about 200,000, suggesting an annual per-capita rum consumption rate of more than 3 gallons.

Sugar planters, especially big sugar planters, largely controlled the flow of rum in the Caribbean. Although a few small-scale distillers operated as part interest and as rural farms, sugar planters fought to maintain their domination of the local rum trade. For example, in 1688, the Barbados Assembly passed an act "That no Person or Persons within this Island shall be permitted to keep any Still or Stills for the distilling of Rum Except such Person or Persons have land and Cattle of their own, as much as they shalling Please" (Barbados 1688/71: 72). People directly involved in the sugar-making sector of the economy were up a good position to get rum. However, not everyone needed or sugar estates, around 1770, Jamaica had, in addition to 600 sugar estates, 150 coffee plantations, 1,100 cocoa plantations, 30 ginger plantations, and 1,500 go-walks (Long 1774): 405-406). Non-tild work on sugar plantations always generated direct access to rum. In the 1680s, Ligon (1687/82) wrote that rum was sold "to such Planters, as have no Sugar-works of their own, yet drink excessively of it." In the nineteenth century, it appears that even then a quarter of sugar estates in Saint Domingue had distilleries, although on Martinique which had benefited from French monopolies in the early 1700s, 60-70% of sugar estates did so (Monsieur de Saint-Méry 1791/94: 111; Schickelshoep 1977: 87, 100). As early as 1682, all of Saint Domingue's slaves lived on sugar plantations; in 1780, access to rum may have been substantially reduced them, although, as almost none was exported, they may have compensated, or might these plantations' productivity. It was therefore necessary for the great majority of people in the Caribbean to get methanol when sugar planters with still houses



How accessible were rum and other alcoholic beverages to slaves? If slaves were not already familiar with rum in Africa, they were quickly introduced to it during the middle passage or upon their arrival in the Caribbean. Dr. Carter (1811:289), a physician and physician to Dr. Watson, advised that, as part of the accustoming process, newly arrived slaves should be given rum "in small quantities, not pure, but diluted with water partly strong ginger, for it is the business of the Master to accustom them by every compliance with their humour, which may otherwise be withheld." Rum, therefore, was used as a salubrious (by and large) transition into Caribbean slavery.

British Caribbean sugar plantations provided large amounts of rum to their slaves as part of weekly plantation rations (Ligon 1657-58; Long 1774-99). In the late-eighteenth century, managers of York Estate, Jamaica (JRP) set aside 800 gallons of rum each year for use on the plantation. If that rum was shared equally for the entire slave population (which at that time was about 400), the rate of per-capita rum consumption would have been about 1.8 gallons. At Windy Park, Jamaica, plantation managers regularly distributed weekly rations of rum and, between 1794 and 1813, it would have provided each of Windy Park's slaves with about 2.5-3.8 gallons per year (Cotton 1891, Cotton and Walter 1972; McPhail 1984-84). In the mid- to late-eighteenth century, between 1.3 and 1.9 gallons of rum was annually made available to each slave at Great Hall estate, Jamaica (Armstrong 1990:10,246). Although these rates represent distribution to slaves (taking no account of the amount reserved for white employees or used as an incentive in the plantation kitchen) some planters and plantation managers dispensed even more more liberally. According to Jamaica missionary William Gordon (1873:319-390), plantation managers on Baiter Hall estate, Jamaica distributed not just to one quart of rum a week to individual slaves, but 2.5 to 3.3 gallons per year.

French Caribbean sugar plantations also provided rum to their slaves. In Martinique, French missionary Peter J. B. Labat (1734:4-33) estimated that 10% of the rum produced on his model sugar plantation, or about 800 gallons, should be annually set

used for the plantation's 120 slaves, which gave an annual per-capita rice consumption rate of about 3.4 gallons/year (see Rose 1981: 34). Parrott 1982: 63. When "refuse" was removed from Labor's report on the level of rice consumption jumps to 40.2 gallons each year (from planters used rice as a dietary supplement to their efforts to run plantation-rice). In 1805, the French government passed the *Code Noir*, which was mostly inaudible and improved the treatment of slaves in the French Caribbean. Article 33 of the *Code Noir* specifically forbade sugar planters to administer an excessive ration for subsistence food to their slaves (see *Physiocrat* 1777: 186). In 1773, Frederick V of Denmark also criticized a slave code, which prevented sugar planters in the Danish islands from engaging in the same rice-eating practice (Jell 1992: 59). Yet, despite these regulations, planters continued to do so; rice was a dietary supplement (Jellens 1904: 134, 152).

Slaves also received different amounts of rice as part of rewards and incentives systems.

For example, in 1797, an anonymous informant wrote:

In the country where the rice are numerous, and by virtue to the coast, they make slaves reap and catch them in abundance, for which on some plantations they receive a quantity of rice proportional to the number taken, which is known by the number of tails they produce.

(Anonymous 1797: 14)

Haitian sugar planter Charles Lhéris (1740-54) indicated that slaves received a quota of rice for every 20 or 30 tails collected. This practice of exchanging rice tails for rice was apparently widespread and existed for many years. Rice was also given as a reward for good work. American sugar planter Thomas Roughley (1823: 98-9) argued that, as an incentive to the principal headmen to do his duty well, "a weekly allowance of sugar or bits of good rum will be found of salutary effect." Planters devised an efficient incentives system, which used rice to improve discipline and behavior a favorable slave disposition.

Rice received rice and other forms of alcohol as an incentive to perform particularly difficult and important tasks. Labor (17794: 55) advised giving slaves rice when doing arduous work, such as digging and cane boiling. Some planters in St. Croix

disappeared run in their dress two or three times a day during planting season (Hall 1989:11). In *Chronicles*, sugar planter Thomas Atwood wrote,

The field negroes, when digging cane holes, have usually in the afternoon half a quart of rum and water (mixed) with molasses given to each of them, which is a great refreshment at that season, and causes them to work with cheerfulness.

(Atwood 1791:257-258)

In addition, Atwood believed sipping “has a good effect on working their bodies, and is much promoted by giving them rum and water.” Sugar plantation work, in general, was grueling and some planters simply distributed shots of rum to their slaves each morning before they headed out to the cane fields in the middle of the afternoon, and when they returned at the end of the day (Dickson 1789:13; Laine 1784:121; Roughley 1823:101, 122).

There also got rum through letters and purchases at weekend markets. For example, Jamaica sugar planter Matthew Mordaunt Lewis wrote that among his slaves were

some choice spirited servants. . . . (including) a young man of a boy called *mouse Jackey* who is in the frequent habit of running away for months at a time, and when I had distinguished him the servants of his master and his country of his masters, came in long run persuading to go and purchase food with some of the money I had just given him. . . . Because he was without money, his garments were dirty, he had no private property, an afternoon, and nobody ever gave him anything. Upon this I sent Colston with the boy to the main keeper, where it appeared that he had always received a regular allowance of provisions twice a week, which he generally sold as well as the clothes, at the day the owner

(Lewis 1804:124-125)

Lewis (1804:125) also noted that some of his slaves sold their produce as “wholesome bignons” for the same purpose. Many such transactions occurred at Sunday markets and, as a result, some planters, including Collins (1831:10-15-16), began the practice of distributing food and drink allowances in the middle of the week rather than the end because “on Sunday is their holiday and market-day they are apt to carry their allowance to market, and to better it for sale.” The exchange of rum for sexual favors provided another opportunity to get rum and one, for example, that Jamaica plantation manager Thomas Thornton frequently gave to the female slaves under his care (see, e.g., Hall 1989:14).

Planters and plantation managers dispensed rum on holidays and special occasions. For example, according to Lewis's diary (1814-74), January 8, 1816 "was a day given to my negroes as a reward on my return. A couple of hogsheads for them they were allowed as much rum, and sugar, and wine, and dancing as they chose." An engraver, Theodorick (joined in Hall 1829-67) "served the Negroes 12-quarts of rum out of the best & filling in the evening house, and two large hogsheads of sugar to make them merry." In 1764, slaves in Cades Cove were, Buchanan was given a cask of rum to help celebrate New Year's (SPC). At Christmas, planters doled-out presents and statements of rum. Bond, corn, herring, and pickled pork (Annapolis 1820-94, Marston 1768-18), In 1765, court-magistrate John Hall plantation, Jamaica awarded first production of rum each year much of it for "all the British Negroes at Christmas time and Easter" (Annapolis 1790-1807).

Rum was also allocated for slave ceremonies like births, marriages, and funerals. M.L.B., Myraux de Saint Mihiel (1807-54) a white Martiniquais Creole who lived in Saint Domingue, wrote, a funeral "is really a big event at which they eat well and drink even better. . . The priest, friends, and fellow indentured are the ones who bear the expense of the eve. . . I also contributed to the expense in the story of the funeral." Theodorick (joined in Hall 1829-1874) also contributed rum to the funeral of a slave on his plantation.

Although planters had great control over the distribution of alcohol, slaves also took initiative in procuring rum, by the mid-to-late-eighteenth century. French missionary Father J.B. de Tades (1687-1874-1814-1892) wrote "I have seen one of our negroes slaughter five of his chickens in order to accommodate his friends, and spend liberally on these parts of rum as evidence evidence that he is a slave of his country." Slaves also found clandestine ways of securing alcohol. In the 1764 British Parliamentary inquiry into slavery, Governor Pory of Barbados believed that many health problems associated with slaves were attributable to rum "which they use" (Crosby, Walvin and Wright 1974:26). Also in Barbados, engraver Thomas Hardy (1810-34) wrote "one of the great public sources

of value [pour du] bon vin of select quality in which the slaves indulge.” Handy argued that the slaves’ desire to drink led them to steal rum, or other goods that could be traded for rum. William Briggs (c.1733-57), plantation manager within P&A plantations in Barbados wrote, “The blacks are constantly intoxicated [Thuring . . .] and [they are] almost daily being Mischance or Run they must be severely handled.” A young domestic slave at Newton plantation, Barbados was executed for just such an offence (Hawley and Lange 1978:90-91). In Jamaica, “pilferage” may have accounted for as much as 25% of all the crime punished on the island (Lange 1774-1994). Theft was also a problem in the French Caribbean. Labat (1724-1762) believed that the rum sold by slaves at Sunday markets in Antigua was often stolen from their masters and neighboring estates. Many planters recognized that, in order to protect their “a fine situation in the territory, secured by good looks and hard” was required (Cotton 1811: 196).

There was one important motivation of the colonial Caribbean for rum and tavern keepers were crucial both to the distribution of rum. In the 1620s, Briggs on Barbados had over 100 taverns, one for every 26 residents (Lange 1974: 12, de Totten 1627-1671). In 1643, Paramaribo, Surinam “consisted of 27 or 28 houses, mostly taverns and bars” (Goolbsy 1983:51-52). In the late eighteenth century, *Plumes de Saint-Hélène* (c.1791/98) believed the number of taverns in Port-au Prince was “infinite.” In the late seventeenth century, the numerous taverns in Port Royal, Jamaica helped strengthen the town’s image as “the wickedest city in the west” (Dunn 1972: 177-183). Antigua’s eighteenth-century taverns, shops, glazes, and thousands of green glass wine and gin bottles, which attest to the vigor of Port Royal’s tavern life (Hawley and Lange 1978:4, Labat 1702-1762: 198-197). Adams (1971, Mart (1962).

Liquor taxes and licenses first paid by tavern-keepers provided essential revenues that helped defray the cost of running colonial governments (Pitt 1733: 14-15). For example, in Jamaica, liquor taxes were charged to colonial licensing fees that covered the cost of social and civil improvements (Goolbsy 1983:288). By the end of the

even twentieth century Barbados and Jamaica both adopted similar tax laws and introduced laws prohibiting the sale of spirits without a license (Austen-Smith 1993: 42–43; Rawlin 1999: 11). Colonial legislatures often placed restrictive taxes on imported wine and bread in order to encourage the consumption of locally produced wine (Austen-Smith 1993: 42–43; Rawlin 1999: 107). Restrictive duties on imported wine and bread also helped the planters draw maintain social boundaries between rich and poor.

Slaves were known to frequent taverns. In Barbados, resources about slave drinking led to the enactment of laws prohibiting rum shops and tapping houses/plan selling rum to slaves or to any person known to sell rum to slaves (Rawlin 1999: 109). The enactment of these laws, however, suggests that they were rarely obeyed and had little effect. In the Danish Caribbean, officials tried to regulate the presence of slaves in taverns and encouraged tavern owners to serve drinks from the back yards (Hall 1992: 121). According to Austen-Smith (1993: 12) water in Jamaica, “Many houses are kept for their [the slaves] refreshment, where they have a meal of coarse bread—called *bab* and *bafter*, and a kind of stew—called *water*.” The water referred to these houses as “strong liquor and rum shops.” Former rumshop owner Eustace Minto (1948: 27–28) also wrote that plantations closer to Cuba frequented taverns, which were “these numerous little holes in the forest.” The many rural taverns that catered to slaves, such as the one mentioned by Douglas Armstrong at Deep Hall in Jamaica, were often better run than centrally located, dirt floored shops where slaves would gather (Armstrong 1990: 104, 108–109, 140). In Minto’s case, “The taverns were made of wood and palm bark, no masonry like the modern ones. You had to sit on pine/pear racks or stand. They sold rum, *gubad* (beer), and had every variety of food.” The strong smell of oranges, smoked hams, and red meat that hanging from the ceiling probably led Minto to describe the tavern as “drinking places.” Rum was sold in the Caribbean today: taverns were places to get drinks and drinks enjoy a variety of games, exchange gossip, debate current events, receive loans, sell goods, and advertise technology as a social purpose (Blinn 1996: 1991). When

(PTE). Sometimes there are provided a safe place to leave stolen rum (Hall 1792:111).

Finally, divided, the variable tavern atmosphere was regularly shaken by bursts and fights/denouements (Hall 168).

The local rum market provided economic opportunities for disenfranchised groups. For example, in Jamaica, Jewish traders entered the local rum trade. Long's description of Jewish trading practices was often critical and full of anti-Semitic remarks: the deeply complicated, albeit the deleterious effects of

a rule confederated compound of new rum, pepper and other ingredients, brewed here by Jewish residents, who, as they pay a tax on their houses, and a duty of the rum they retail, have recourse to their religious practices, as well as to follow their profit upon the miserable consumers, who are chiefly the soldiers and men-of-war of white

(Long 1774:130)

In addition, Long (1774:145-146) objected to the fact that Jewish men seldom did not carry arms or participate in the island's militia on the Jewish Sabbath or during Jewish holidays, but had no problem "taking money and vending drums upon those days." Moreover, Long (1774:146-147-148-149) protested against the Jewish practice of "retailing rum at Sunday markets because 'the rum was expected for drink' did not go to Christian rum sellers. Subsequent freedom also seemed part of the local spirit trade. In the 1770s and 80s, Richard Phipps (Phipps, a freemason, was one of the most popular taverns in Bridgetown, Barbados, which catered to the colonial and military elite (Hendler 1981; Coleman 1942:107-108). George Phipps (1814:117) a military physician who visited Barbados in the early nineteenth century, wrote, "and he is commonly known by the names of the persons who keep them" and among the two taverns "most frequented, is Bridge Lane, and those of Henry Clarke, and Mary Bell-Grove, the former a black—the latter a white woman." A visitor to Kingston, Jamaica noted "many of the free negroes, especially the women keep lodging houses and taverns" (Mortimer 1788:7). According to Long,

The most wholesome beverages (for consumption) would be sugar and water, milk or wheaten, moderate allowance of wine and rum, which is well preferable to the good drink

[probably a fermented sugar cane juice] prepared here by many of the free negroes and mulatto women, who used it cheap to sell it.

(Long 1794a: 344)

In Trinidad, some officials believed that slaves supplied molasses rum to freedmen, who were considered the primary consumers of stolen goods (Foster 1896:209).

Slaves also took advantage of local rum markets and sometimes became critical links in the local distribution-chain. According to Foster (1867: 147), slaves in Martinique collected the clackage that spilled over during the sugar-fermenting process and made "intoxicating drinks from it, which do a good trade in the island." Nearly two centuries later, Saint-Jean, an emancipated slave on the sugar estate of Platan Doreville in Martinique, sold rum with his common law wife in a shop set up on the plantation (Foster and Foster 1996: 20). Doreville apparently encouraged the commercial pursuits of his slaves and, in 1823, he took his slave Michelman to his coffee plantation, where she too sold rum (Foster and Foster 1996: 25). Among the runaway advertisements in Saint Domingue in 1790 was an extraordinary 24 year-old Mousmiquet man who brought rum in the guise of sugar molasses and sold it in the mountains (Gaggen 1961: 125-126). And in Bordeaux sugar plantation in Saint Domingue, an "informal" slave woman was responsible for local rum sales (Delam 1974: 127).

Historical ethnographies of slave life commonly stress the survival of African cultural traits in the Caribbean. Beginning with the pioneering work of Melville Herskovits, historically minded anthropologists have sought to connect Caribbean slave traditions to Africa. Although Herskovits used broad-culture area concepts of West African traditional African customs, his research also identified the specific origins of particular cultural influences (Herskovits 1941). For example, Herskovits (1937, 1947) linked Vodou religion with the religious practices of the Fon-speaking peoples of Gabon and identified the Yoruba roots of the Shango cult in Trinidad.

In 1976, Sefery Minto and Richard Price (1980) revised the Herskovitian model in an attempt to explain commonalities across the Atlantic diaspora despite the cultural



heterogeneity of slave societies. Mota and Price's model emphasizes the Creolization of African slave cultures rather than the identification of specific West and West-Central African cultural roots. They believed that the multicultural nature of the slave trade (the violence of the middle passage, and the brutality of plantation or slavery-dominated slave societies) frustrated slave-to-contrast (i.e. new African American) culture. The Creolization process began between departure on the very ships that transported slaves to the Americas and continued once they arrived at New-World locations. American plantation (according to Mota and Price, the birth of African American culture represents a dialectic between the shared racial context of enslaved Africans and the cultural/social contexts in which slave societies developed. For example, they argued that shared beliefs about the evil magic of ancestral spirits led to syncretic religious adaptations that transcended cultural differences under plantation. Thus, *Santería* and *Haitian voodoo* combine an underlying principle of West and West-Central African belief systems, *animism*, (the "invisible" nature of West and West-Central African culture, recognized syncretism in slave religions (Mota and Price 1995: 44–46).

More recent work on the Atlantic slave trade has returned to the earlier emphasis on the impact of particular African ethnic groups on particular parts of the Americas (Price 1995; Little and Richardson eds. 1997a, 1997b). The slave trade evidence has renewed the search for specific cultural influences in the Americas. Kenneth Surin (Law 1995), for example, identified the particular influence of Anlo slaves from the Dahomean region of West Africa on the *Bon-Cœur* ceremony that preceded the Haitian revolution. Based on the *anlo* (Anlo) slave ceremony, Law argued "The ceremony at *Bon-Cœur* in 1791 is clearly recognizable as a Dahomean type ritual with . . . (George) Chambers (1997) used the slave trade theory here for "Igbos" in American slave culture. According to Chambers, some of the most celebrated American slave cultural practices, such as *jumping* and *shouting*, represent Igbos culture.

On the drinking practices of Caribbean slaves, most of the direct transfer of particular African drinking customs to the construction of new drinking behaviors based on the

shared beliefs of various African ethnic groups? Answering this question is difficult, because most of our information about both African and African slave drinking comes from European observers. Indeed, to explore the reasons of peoples drinking remains Moroccan. African and African slave drinking rituals were usually private events conducted away from the eyes of Europeans. Thus, we may simply lack the raw evidence that would allow us to make a strong connection between the drinking practices of particular African nations with those observed among African slaves at the Caribbean. Yet, the evidence does show that, at the level of the lowest common denominator, African slaves in the Caribbean created drinking customs, which reinforced their shared West and West Central African beliefs about the spiritual meaning of alcohol.

John Thornton's (1993) study of the rise of the Afro-Atlantic world provides a good model for exploring the drinking practices of Caribbean slaves. Thornton argued that Islam and Protestantism dominated the religious and socializing efforts of the Atlantic slave trade. Rather than seeing a heterogeneous mix of West and West Central African cultures, Thornton, at Northcote, focused on broad bundles of cultural traits and saw West and West Central Africa as very homogeneous. Thornton identified three cultural areas and seven cultural sub-areas, which, he believed, shared a great deal in common. Moreover, Thornton argued that West and West Central Africans became increasingly homogeneous as a result of the rise of large African states and the expansion of European trade. Although Thornton concluded that differences between intra-cultural areas was an obstacle to the transfer and re-emergence of particular ethnic practices in American plantations, it did not prevent the construction of a new African-created culture in the Americas. Thornton stressed the cultural flexibility and adaptability of Africans who were able to merge their beliefs and ideas with those from various parts of Africa and Europe. What is most original in Thornton's argument is his belief that the processes that led to the rise of this new Afro-African culture emerged as colonial African societies no longer Africans long before they arrived in the Americas.

Thomson's examination of the use of Afro-African religions particularly pointed to the study of *abokodé* use among Caribbean slaves. At a basic level, Africans and Europeans shared similar beliefs about the nature of religion, especially the belief in a spirit world that interferes in existence. Africans and Europeans also believed that the spirit world could be descended and driven through rituals. As a result of increasing interactions between European and different African groups, a new Afro-African religion emerged that was often classified as Christian, especially in the New World, but was a type of Christianity that could satisfy both African and European understandings of religion. According to Thomson,

This new African Christianity allowed some of the African religious knowledge and philosophy to be incorporated as a European religious system and represented a strategy of "good and better" similar to the creation of Christianity for Black slaves.  
*(Book One of the Colonization of Islam)*

(Thomson 1992)

African priests brought to the Americas as slaves, profoundly revolutionized that helped build Afro-American religions from the various African beliefs. Like a drop from a language system, African Christianity facilitated to the task that brought together slaves from various nations.

One similarity that Thomson overlooked in his analysis of Afro-African religion systems was that most Africans shared similar beliefs about the spiritual importance of *abokodé*. West and West Central Africans, with the exception of those at the northern margins of the slave trade who closely followed the teachings of Islam, believed that *abokodé* facilitated communication with the spirit world. Through libations, offerings, and *abokodé* induced spirit possession, Africans opened lines of communication to the spirit world and showed reverence to ancestors, gods, and deities. Moreover, these practices were seriously unfamiliar to Christian Europeans who good incremental ways to strengthen their own sense of spiritual attachment. Common beliefs about the spiritual importance of *abokodé* merged in Africa unlike the slave placements in the Caribbean and helped unify Africans from various nations. The incorporation of *abokodé* observed among

African slaves in the Caribbean highlight the construction of new African-oriented drinking customs, based on the former common consumption of beer, shared with us.

Whether we recognize arguments of cultural hoppers like Hesketh and Thomson, who defined broad African culture areas, or cultural splitters like Meier and Prior, who saw African-cultural heterogeneity, the influx of slaves imported to the New World in the sixteenth through nineteenth centuries came from diverse West and West Central African cultural backgrounds. Historical evidence from centuries' accounts, medical reports, and trade records indicates that alcohol figured prominently in pre-colonial West and West Central Africa and that most slaves came from societies with strong traditions of alcohol use. While the arguments advanced here replace the history of shared West and West Central African beliefs about alcohol, the latest work on the Atlantic slave trade has shown that various African ethnic groups were concentrated in particular regions of the New World. These slaves, presumably, had a major impact on the drinking behaviors that developed within those regions. Moreover, we must conclude that European writers may have simply failed to provide as well thought information as perhaps particular African cultures. In order to account for the new evidence and to bring a balance to the debate over the emergence of slave culture, I focused, in the previous chapter, on the drinking patterns of four African ethnic groups viewed by most historians as having the greatest impact on French and Spanish-Caribbean slave life. As that discussion showed, all shared similar views about the basic, essential importance of alcohol.

The Igbo from the Delta of Biafra and Akan from the Gold Coast evidently had a greater cultural impact on the Spanish-Caribbean than other African groups. According to Douglas Chambers (1997: 77), between 1700 and 1820 the Igbo represented as much as a third of all slave arrivals in the Spanish-Caribbean, a higher percentage than any other African ethnic groups for that period. The Akan also greatly influenced slave life under British-Caribbean rule as their seventeenth century presence in the region. This study presents the possibility that Akan slaves would have had a profound overarching impact on later

drug rituals from other West and West-Central African cultures (Hartmann 1986: 26–33; Mink and Price 1992: 42–51). There are good grounds for believing that the drinking practices of Igbo and Akan slaves significantly shaped drinking behaviour on the British Caribbean and undoubtedly influenced Igbo and Akan forms of alcohol use shouldered into the symbolic meanings of street drinking.

Slave societies on the French Caribbean were in the same way deeply influenced by particular African ethnic groups. In the eighteenth century, more than 75% of Africans brought to the French Caribbean came from the Right of Benue and the Congo/Angola regions of West-Central Africa. In the first half of the eighteenth century, and probably before, most Africans destined for the French Caribbean departed from the Right of Benue (Hills and Richardson 1971: 14–15; Geggus 1982; Law 1994). A series of wars in the early eighteenth century during the time of the European longhorn production disease and helped make Whydah the main source of French slaves. In the mid-eighteenth century, the Congo/Angola region of West-Central Africa became the major departure point of African slaves. European competition in the Right of Benue forced French slaves to turn south to the Portuguese controlled regions along the Congo/Angola coast (Hills 1988: 13–15). Africans transported to the chief French colony of Martinique disproportionately came from the Right of Benue reflecting the early settlement and development of that colony (Geggus 1986, 1994). The French slave trade shifted to West-Central Africa in the mid-eighteenth century and the increasing demand for slaves at Saint Domingue meant that West-Central African “Congos” were the most numerous ethnic group in the colony and they dominated the coffee trade that expanded after the mid-eighteenth century (Geggus 1988: 9).

Before the armed nature of abolition, West African societies entered the violence of the middle passage and took hold in the slave societies of the British and French Caribbean. The ready availability of alcohol during the slavery period allowed African slaves to continue traditional African drinking practices. In the eighteenth century, African

de Saint-Méry (1795/96) wrote, "When the slaves come off the ship they are not greatly surprised at the various natural products of the island. There are all too similar to what they know in Africa." Alcohol was among these products. In fact, according to Caribbean traveler Charles de Bouchefort (1681-1847) in the mid-eighteenth century, newly arrived African slaves in St. Kitts made incense in palm-fruit, extracted the juice, and made "liquors similar to what wine." This description of palm-fruit-making parallels those left by European travelers to pre-colonial West and West-Central Africa and indicates that African slaves attempted to recreate traditional palm-fruit products once they arrived in the Caribbean. Yet, while the use of sugar-making in the Caribbean *was* because the alcohol byproduct of ethanol was of choice. Under the harsh conditions of Caribbean slavery, rum was used to help maintain a symbolic connection to Africa and the ancestral world. For those slaves who were not already familiar with rum in Africa, the story of its origins were ritualized alcohol incense and incense of spirituality highlight the cultural adaptability of African slaves first changing their African social environment. The ritual use of alcohol on the plantation also helped define slave identity, which made it an important weapon in the arsenal of slave resistance.

The spiritual component of alcohol was not unique to the African slave. Alcohol played an indispensable role in the spiritual beliefs of all the major social groups in the Caribbean including: Dutch Indians, Jews, Catholics, and Anglicans. The use of alcohol for religious purposes was familiar to the slave owner, and, therefore, may not have been seen as an inherent challenge to the morality of the slave system. However, the hostile social environment of the Caribbean generated new concerns that resistance led African slaves to embrace the more aggressive spiritual aspects of alcohol use. Several of the more violent expressions of slave spirituality did concern the poison plant and alcohol often helped define resistance.

The religious practices of British and French Caribbean slaves demonstrate the link between alcohol and the ancestral world. In the British Caribbean, alcohol was a religious

form of slave trading and enslavement that sought to control working and a traditional system of debt-slavery. Some scholar Joseph Williams (1982: 130), argued that the practice of slave labour from Akan religious practices. However, Jonathan Douglas/Chambers (1997: 88) has challenged this explanation claiming that the term *aboin* emerged from the *kyid-dinin*, meaning a doctor or healer who had close contact with the spiritual world. In all likelihood, *aboin* represented a mixing of various West and West-Central African religious practices that resisted conversion and sought spiritual assistance in worldly endeavours. According to Robert Hunkeler (2000: 63): "For whites, *aboin* became a catchall term for a range of supernatural-related behaviors that were not of European origin." *Aboin* related heavily to the sacred nature of alcohol. Colonial writers saw *aboin* as a threat to the stability of the colonies and tried to control its practice. The laws made numerous references to the use of alcohol as *aboin* linked with anti-colonial movements. For example, in 1782, Napoleon's laws, was inaugurated off Jamaica. "For making use of rum, beer, chocolate, and other materials relative to the practice of *aboin*, or witchcraft" (cited in Williams 1982: 130). According to Jamaican sugar planter Bryan Edwards (in FPH 101: 112), colonial officials identified *aboin* practitioners by their behavior, which typically included rum. In the context of British Caribbean slavery, rum replaced the traditional palm wine as the beverage in the spiritual world. The use of rum as *aboin* practices reveals the persistence of African, especially Igbo and Akan, beliefs about the sacred nature of alcohol.

French Caribbean writers also provided valuable information about the connection between alcohol and slave spirituality. Alcohol helped facilitate communication with the ancestral world in French Caribbean slave religions. Thomas de Saint-Aubry (1791/1987) wrote, "The Negroes' belief is vague and the practice of their faith does follow their/their customs." The spiritual uses of alcohol followed as well.

Voltaire has Mouton's character describe African-oriented religions in the French Caribbean especially at Saint-Louis. Hunkeler (1977: 136) wrote under "a n

complex of African belief and ritual governing village movement for eligibility of the *Florian* journey.<sup>1</sup> It is accompanied by dance, spirit possession, and communal study. The roots evolve, meaning dances, rooted from the Ago-Pon people of the Bights of Benue, where in the eighteenth century, Gabonay became the most important state. Kourou (or the French in Asia) they worshiped the principle of humanity and moral duties (Geggus 1981: 44–45). Gabonay invaded and conquered the kingdom of Akala in 1754, which resulted in the shipment of many Akala to the French colonies in the New World. Similarly, according to Ellis (1994 cited in Williams 1992: 19), slaves from Whydah, conquered by Gabonay in 1727, also significantly influenced religious Kongo. More recently, scholars have reevaluated the impact of “West Central Africans in Saint Domingue and Caribbean nations about the purity of Akala and Whydah influences on voodoo” (David Geggus 1991: 135). For example, Howard “a very strong Kongo element in what is presently called voodoo.”

Yoruba and ancestor worship were transferred to the Americas, where they continued to play an active role in the lives of French Caribbean slaves. Maman de Saint-Méry provided a new description of the use of voodoo in a voodoo dance among the slaves of Saint Domingue:

[W]hen, in the course of her [the dancer’s] transport, various bacchantes (the words she often utters in voice, the words King and Queen, her three bodies in line, the seven mountains). The dancer assumes herself, assumes the words, begins, ends, drinks, and finally becomes cooperative. . . . The religious response is a further answer by the use of spontaneous lyrics which in the articulation of their metaphors the dancer de-encapsulates and which keeps them up.

(Maman de Saint-Méry 1793/1961 cited in Williams 1992: 66)

Geggus (1981: 25–34) examined the case of Madame Proteus, a prostitute who attracted large gatherings of slaves and sold women into (forced slavery) courts for ritual purposes.

According to the eighteenth century reports on the case, these women were placed in two tall garbodies “to make them angry” and, then, to intensify their power. Participants also consumed mixtures of rum and cooked manioc (cassava) during voodoo ceremonies.





accords [perhaps even human contact] as indispensable to society." Morton wrote Elmer Merwin (1917 cited in Williams 1952: 81-82) wrote that "the secret of [booting of the drink – the right and taste of food, and the great amount of rum drink] were a religious form of hysteria: rum up there alone." "Caribbean traveler George Washington Stodd,"

It is certain that the African Negroes will assemble in groups or companies for dancing and other such they are influenced by the arrangements of their food and wild dancing, rum-drinking and not so the proceedings. [It is alleged] that small children were killed and eaten, in short, given [and then] ritual associated with rum and death.

(Stoddard 1929 cited in Williams 1952: 81-82)

According to Caribbean physician D. Threlkeld (1883-cited in Williams 1952: 82-83), the "treatment of alcoholism and harmful statements, where a sort of hypnotic effort of the medical doctor is done to make the participant susceptible to pain or when he plunges his hands in boiling oil." Although steeped in Victorian-era science, these accounts do suggest that alcohol was, at the very least, an essential component of rum's consumption.

Besides its role in resistance and communion, rum was an important ingredient in witchcraft and/or a part in many protective charms (Williams 1952: 28). According to writer William Seabrook, a traveler's "charms," which Seabrook called "death charms," included the passage,

Distillations were in the house to keep the people from death. (Come here to I know how and spell him to I spell him. By the fire at night, by the dead black leg, by the bloody throat, by the pink, by the rum on the ground) this charms to open him. May the have no power on him nor on his food nor can he kill. Woe to him and woe to him and not him to him not.

(Seabrook 1929 cited in Williams 1952: 28-29)

In fact, the spirit of Aunt Corcoran, an important female household magic, was commonly incorporated on All Saint's day and asked to protect the family and community in the coming year. During the ceremony,

Clarks or doctors came around each table of the community and some or also sprinkled in the corner and in each corner of the restaurant of food. There lots of northern family threatened the corners of the community and taken to the home of the "wonder" (Note: they are patient [place with] corner, which is first lighted and

then interrogated, so that the members of the family can stand forward with it and receive strength with respect to face the new year.

(Hankerson 1907: 226)

The African tradition of using alcohol at birth ceremonies continued among the slaves of the British and French Caribbean. Parties were generally reserved from other birthday practices, celebrations, and rites. Slave masters usually wanted birth and birth ceremonies took place very close to the plantation. Most accounts of birth ceremonies are *sketches, cues and details* about the use of alcohol at these ceremonies; very few sources, however, do. Davis (166? 167? 169? 493) wrote that the slaves have a superstition of the birth of their children, even the other slaves of their country, and will "celebrate, they say," in order to have enough rum for the birth ceremony. Leach (1714-475) believed that the rum-fueled merrymaking was due to the high rate of slave infant mortality, which he blamed on the practice of giving rum to newborns. As late as the 1920s, historian Martin Brinkley (1929-191-98) recorded a birth ceremony at home in which "On the main day, a bath is prepared for the child [with] a little rum thrown into it."

The lack of references about slave marriage sites in the Caribbean demonstrates our understanding about the role of alcohol as slave master. In 1758, Carlisle Houghton (1750-17?) argued that Barbadian slaves maintained traditional African marriage customs but he did not specifically mention the use of alcohol. Anthropologist Robert Dicks expressed frustration over the limited information about slave weddings in the Caribbean. Dicks (1987a: 111) wrote that this lack of knowledge has led scholars to conclude "more through busy conjecture than a thoughtful appraisal of the historical evidence" that slave culture contained "a widespread wedding rite." Dicks described house-building as an example of a re-interpreted marriage custom that was transformational African to the Caribbean. House building was essentially a custom in which a man who had reached marrying age built a home where he and his partner would make up a household. However, there are a few interesting alcohol-related house-building cases, including an early nineteenth century report from Miss A. C. Carmichael in St. Vincent. According to

Compelled (quoted in Doris 1929: 422). "The custom of a marriage, it is often necessary to build a house, and that necessarily money making. The master or manager sends out run and sugar to those who have helped building," is a more recent example of house building in Jamaica. Bushaw (1929: 15-16) wrote that, once a spot was chosen for the house, participants "balled a field and pointed delimited out with run upon the ground. A line of chicken and run was also made upon the spot where the house was to be built. In Montserrat, according to de Toker (1867: 167), 485-487, de v. parents requested a celebration when they married off their children and got assistance from their mothers, who gave them much money and valuables. Henderson recorded that, in Montserrat, Barb, the bridegroom provided the feast which followed the wedding ceremony held at the couple's new home.

There coffee, liquor, wine, food, and valuables served to the principals and the most important members of the community. All others stay under the broad shelter which has been erected at the side of the house, where one or two the common drink of the British present, claret, new rum.

(Henderson 1907: 114)

Added also figured prominently at other funerals, for which evidence is more abundant. According to Long (1774 B: 421-422), "drinking, dancing, and reveling" characterized the funeral of Branch Carthon (died in 1688). John Taylor (quoted in Doris 1929: 12), a western Jamaican, recognized the central role of the deceased's friends and observed that, after offerings, including rum, had been placed on the grave they "fill up the grave, and eat and drink thereof." In 1740, Lister (1740: 207-208) wrote that clients were hired to make "a pot of soup or for bread-and a bottle of rum at the fee." In 1774, Anwood (1774: 261) described the role of clients at slave funerals in Dominica. "These superstitious notions with respect to their dead are truly ridiculous, for they suppose that the deceased both eat and drink as their welfare; and for that purpose they purchase viands for both." Anwood also noted the custom of making offerings to the deceased. These events typically occurred at the Christmas holiday, when alcohol was widely distributed to slaves. According to Anwood

At this time too, they perform their offerings of victims on the graves of their deceased relatives and friends: a piece of superstitious which all negroes are addicted to: and which, were they to suppose doing, they hardly believe they would be permitted by the spirits of the deceased persons. This offering consists of meat, whole kobs, pigs, or fowls, with beads, incense, and other matters, and is performed in the following manner: a slave is chosen, accustomed to the necessary duties of work about his master's house, raised the grave, and putting some of it in pieces, throws the same on the grave, calling out at the same of the dead person as if alive, saying, "Here is a piece of such a thing for you to eat, why did you leave your father mother, wife, children, friends? Did you go away angry with us? When shall we see you again? Make our provisions to grow, and make us food, don't let anybody do us harm, and we will give you the same next year." With this like expressions to everything they throw on the grave. After which, taking a little of the same or other leaves, they sprinkle it through the ground in the same manner: "There is a little more to comfort you, don't grow good bye to you, God bless you!" and throwing some of it downwards in the middle of the deceased, they cry up a dismal cry well known, but immediately after begin to dance and sing round the grave.

(Ainswood 1793: 260-264)

In the French Caribbean, the successful return to the spirit-world is death also constituted the use of alcohol. Hyppolite (1897: 208) wrote "the dead drink, eat, enjoy like the living, therefore they offer them food and liquors, arms and furnishings, and, we like their spiritual interests and wishes in the other world." According to Henslerstein (1987: 208-211), there was a central element of a ritual based: "When drinks are passed, the respondents make three libations before drinking." As among the Aka of the Congo River, Henslerstein noted alcohol was not given to the dying or put in the mouth of the deceased for fear that he or she might become drunk and not reach the spirit world. After the individual had died, libations were passed to help him or her transition to the spiritual world. Death and spirits are also linked through the use of smoking: "when deep Gade, ruler of nature, see (Henslerstein 1987: 214).

To this evidence from graves of the use of alcohol has been laid to rest by in the first slave cemeteries that have been excavated. For example, in the early 1970s, Jerome Handler and Frederick Lange (1975) excavated 50 burials in Newswick plantation, Barbados. They discovered historical evidence of placing bottles of alcohol on the graves of the deceased and uncovered a large number of tobacco pipes that were used as grave goods. In comparison, burials associated with key of the family. A tobacco pipe, too, was associated

found buried at an unmarked eighteenth-century slave cemetery in Georgetown, Barbados. The grave contained shards of glass from bottle glass, but the fragmentary and incomplete nature of the glass suggests it entered the burial accidentally and not as a grave good (Smith 1998). At the eighteenth-century Henry slave cemetery in Montserrat, archaeologist David Watkin reconstructs "Tridaphne's Burial as life" bottle from the cemetery that may have contained rum and have a grave good buried with one of the deceased (Watkin 1987, 96). (1988). Despite Leach's claims that British Caribbean slaves buried bottles of rum with the deceased, the lack of bottles recovered from slave burials indicates that the demand for bottles among the living outweighed the need for bottles as slave funeral rites. Bottles were passed for practical purposes and do not probably modified West African customs to meet local conditions. Thus, slaves probably spiritualized alcohol with the graves of the dead rather than as liquid-filled vessels.

Akan Wives and West Central Africa, a small ruling class, who held the land and labor necessary to produce rum, largely controlled the flow of alcohol in the Caribbean (Okyemungu 1997 [2, 14-45-46] see also Poku 1992). Caribbean sugar planters, as with African tribal chiefs and rulers, therefore, had possession of a powerful institution was essential for opening communication with the spiritual world, securing spiritual guidance and ensuring a successful transition during time of passage. In addition, the sugar planters distribution of alcohol at births, weddings, funerals, and other important events, paralleled the pattern of alcohol distribution found among chiefs and rulers in West and West Central Africa. This hierarchical control of alcohol production from land to African slaves in the Caribbean and may have helped legitimize the power of the Caribbean planters class.

Slaves, however, alcoholize resistance to getting alcohol for spiritual events and time of passage and something is an important event in Jamaica (1795 [18], "the best words and some liquor are given and [by slaves] is given plenty" in these occasions. From and sometimes, like those described above, materialized social ties on the sugar plantations. Alcohol rituals is ritual behavior at these events, which helped create of a more unified

short community. Leacock (1904:90-91) argued that one of the primary functions of slavery in African societies was to bind in the foundation of social intercourse and the integration of community members. Community building would have been especially important to newly arrived Africans slaves in the Caribbean, which probably compromised social and spiritual values of race.

Slave/West and West-Central African beliefs about the sacred nature of alcohol and the active participation of the ancestors in daily life took root in the slave societies of the Caribbean. As in Africa, alcohol-based rituals, offerings, and spirit possession helped Africans slaves in the Caribbean facilitate communication with the spiritual world and leave the domain of secular space. Within the diverse African cultural context of the Caribbean slaveplantation, alcohol became a rich full substance for all dealings with the spiritual world. But why did highly volatile race relations in the same spiritual manner in individual societies throughout in Africa? The powerful physiological effects of alcohol, especially a potent spirit like rum, altered consciousness and made it a powerful vehicle for escape to the spiritual world. Moreover, since the seventeenth century, West and West-Central African religions used as a spiritually-oriented ritual and often used it as place of religious alcohol beverages. Many slaves, therefore, were already familiar with rum and its spiritual associations when they arrived in the Caribbean. The suspicion generated by the hostile social environment of the Caribbean sugar plantations motivated the African slaves' conscious reliance of alcohol as a temporary means of escape to the spiritual world, as well as to Africa. The spiritual use of rum by diverse ethnic groups in Africa and their representations and descriptions in the Caribbean also highlight the adaptability of the Afro-African economy. Like the rise of Afro-Antony Christianity, rum became a unifying feature of the Afro-Antony world, just as the consumption of slave-made Caribbean rum helped Africans in Africa make a symbolic connection to their homeland overseas, it also helped these Caribbean slaves form a link to their African homeland

## CHAPTER 10 ALCOHOLIC MARRIAGE, IDENTITY, THE MOJO, AND ESCAPE IN CARIBBEAN SLAVE SOCIETIES

*African slaves embraced rum and rumed fluid that enhanced connections to the spiritual world and strengthened ties to African culture. Yet alcohol of course had similar as well as spiritual uses. Rum was a commercial commodity produced under a different social climate subject to the harsh realizations of slavery for a distant market. It was also a highly volatile fluid, considerably more powerful than the low alcohol content fermented beverages typically encountered in Europe, Africa, or the pre-Columbian Caribbean. This vulgar side of rum made it an effective tool for subverting rumors and pernicious goals. The use of alcohol to confront worldly concerns is evident in the group defining patterns of drinking and in the increasingly aggressive aspects of alcohol use reflected in the growing links between drunken violence and individual subjectivity. Drinking became a means to release social pressures, circumvent authority, and challenge structural constraints which continuously made alcohol a powerful symbol of temporary and permanent escape through the creation of the drinking social order. Understanding these patterns of alcoholism provides a prism through which to view subverting and even evading slave social order. Caribbean slave societies.*

### The Identity-Defining Role of Drunken Caribbean Slave Societies

Drinking in ritual behavior linked fluid symbolic meaning. The type of alcoholic beverages consumed, levels of alcohol consumption, preparation of drinks, drinking comportment, and context of drinking performance convey messages that distinguish group identities. As a result, drinking is often integrated into broader social strategies, which have helped define boundaries between self and other as a marker of historical non-west cultural settings. For example, the use of distinctive levels of drinking practices emerged when the



Belmont sought to distinguish themselves from the "superior" drinking of Caucasians (Keller 1979:409). In 1914 A.D. Baxter (quoted in O'Brien 1981: 140) commented that when drinking Kwanan with two-drinking Danceson tribes,

...Native studies in Africa have emphasized the way in which drinking has helped democratic economic class and equal African identity in the face of colonial rule. In the early twentieth century, as the West African Gold Coast, illicitly-distilled liquor became an important symbol of working class identity with other symbols of the British colonial state (Akyempong 1986: ch 14). *Akyemsha* an illegally produced gin, provided a cheap high that helped meet the growing alcohol demand of urban migrants and laborers along the Gold Coast. Its expression of working class identity was strengthened in the 1930s when British colonial officials raised taxes on imported European spirits as effort to reduce drunkenness. The price hiked and the highest of European spirits (imported from Gold Coast) is substituted in the illegal-*akymsha* trade. According to historian Emmanuel Akyempong,

the discovery of akymsha made it a contemporary drink. Laborers involved in extracting mineral wealth found akymsha "conspicuously effective against...Pain as organic ailments, malaria, and problems of akymsha were depicted as less class and ethnic groups by the educated elite and by "ladies." To drink or resist akymsha meant standing social values...for common (imported) European drinks were seen as symbols of social status, among the especially middle on the Gold Coast. Although the upper classes would not refuse an akymsha patron (because of their professed sense of African solidarity, they suspected their society. Patrons of akymsha found themselves in a new way to the politically against the colonial state) and socially against the educated and working African.

(Akyempong 1986: 115)

Black and locally made alcoholic beverages became symbols of identity and class struggle throughout colonial Africa (Austin 1958:255-311, 1960:161-183, Dabau 1983, Demein 1974, in Hunter 1981, , Lee 1964:428-434, Obeyes 1976: 179-308). In South Africa, the added dimension of the Apartheid system made illegal beverages a powerful symbol of black South African resistance to white rule (Cobley 1997:70-100).

Similar arguments have been advanced about drinking in colonial North America. According to historian William Furstburg (1977:138-158), expensive and imported wine

was a symbol of elite status while locally made rum and whiskey served the working masses. Rumsbaugh argued that one of greatest challenges of North American temperance reformers was to persuade the upper classes to give up their excessive consumption of whiskey, thereby set an example of moderation for the average citizen for the new Republic. However, consumption of this status sacrament increased the use and display of rum. Reformers struggled to change elite drinking patterns, but, according to Rumsbaugh, it was the new philosophies of individualism and egalitarianism – which sprang from the American Revolution – that made elite symbols like expensive wine drinking inappropriate. As a result, elite wine consumption declined in the new American Republic. In the late nineteenth and early twentieth centuries, alcohol use continued to demarcate social class in the United States. Heavy drinking became a defining feature of American immigrants and wage-workers and this was especially evident in the metropolitan centres. According to folklorist Ishlaheta Powers (1997: 89) the persistence of alcohol among working class metropolitan residents in the temperance decade of the growing middle class ‘in addition to beer and whiskey helped express the character of the working masses. Powers wrote: ‘Probably the principal reason why workers rejected “cocktail culture” was that such polished drinks were so very deeply associated with their norms of masochic behavior.’

Social groups in the Caribbean also used alcohol to define boundaries. Whilst it may be apparent that different classes use alcohol to signal and reinforce identity, the importance of social groups in the Caribbean was much more complex, responding not only economic class differences and cultural diversity but the added dimension of gender and racial inequalities as well as non-recognized legal status. Caribbean peoples had access to a wide range of alcoholic beverages. They produced rum from various local resources and, during the sugar revolution, turned to rum as the staple alcoholic drink. Imported alcoholic beverages from Europe were also available. As a result, the consumption of unique drinking styles became a principal means of expressing social group affiliation.

Caribbean historians and anthropologists have made alcohol one a defining feature of Caribbean society. Carib drinking positioned us the current island *caracas*. *Calixto* promoted the introduction of Carib spirituality and was incorporated into many aspects of daily life. The fact that calixto is one of the Carib words we still know today attests to its importance as a symbol of Caribbean (Holm and Whistland 1992:143). European was fascinated by the manufacturing process of calixto making and frequently recorded details about its production. However, calixto was fundamentally Carib and although Caribs taught the art of making calixto to their Europeans, early writers all noted that calixto was a Carib Indian<sup>2</sup> drink. For example, according to French linguist Father J. B. Labat (1724:118) calixto is called the "theriacal" drink of the Caribs. English refugee and ethnologist William Richard Lucas (1857:32) wrote that, prior to the Barbadian war for calixto, was "a drink which the Indians make for their own drinking." Although various island ethnologist drinks were eventually Carib, missionary led Lucas and other Europeans to treat them. British colonial historian John Oldmixon (1719:II:332) for example, wrote, "This a very healthy Popponion, and our would think by its Fine Taste that it had been some more dainty drink." Stress also drink (also calixto and), in the late seventeenth century, Labat (1724:132) wrote considered calixto one of the "ordinary" drinks of slaves in Martinique. However, it seems that, if calixto regularly used across-based alcoholic drinks in any great amount, that use was largely confined to private slaves or areas with dense Carib populations in the seventeenth century. Similar to adaptation in Ghana, calixto continues to serve as a modern day symbol of Carib identity and has been used to counter the effects of centuries of European colonization on Carib reserves in Dominica and St. Vincent and in the various regions of British Guiana (Amplified 1873:56; Holm and Whistland 1992:132-133).

Caribs used alcohol to express various social divisions within their society. In 1580, George Clifford, an English privateer, landed in Dominica to supply his

expulsion and ethnic tension. Clifford made detailed observations about the Caribs of Dominica and collected information about their drinking practices. Clifford joined in Hallam and Whitehead (1952: 17) wrote, "they make drinks of their various [various] sorts of their gums [pumpkins] (and it should seem that might be mace-doffers [spice], hunkles [herbs] and reserved for the Kango sap made of potatoes [mash]" Carib greater divisions were probably also expressed in the choice of alcoholic beverages. According to the diary of black-colonial schoolmaster William Young

They abstain from the chief of the Caribbes in the quarter of Meeme Young (as St. Vincent) and from the chief of the Grand Sable Caribs at the head of about twenty yards into the port after dinner and had a dose of rum or any sort of Caribbe liquors and of Kow and pine apples. We treated them with wine and afterwards always furnished their tables with rum which they preferred rum. (Young 1791 cited in Hallam and Whitehead 1952: 215)

Carib drinking preferences may have also expressed European allegiances. For example, Captain John Brinkley wrote (cited in Hallam and Whitehead 1952: 179) reported that the Black and Yellow Carib chiefs of St. Vincent drank wine but "they seemed to drink rum." Historians Peter Hallam and Paul Whitehead (1952: 172) have suggested that the Caribs' preference for wine over rum reflected an understanding on the part of the Caribs of the disciplinary power of the British who were there to explore the possibility of establishing a settlement. The preference for wine over rum indicates that Caribs defined particular Europeans by their alcoholic beverages, which, at that estimate, may have allowed them to express their allegiance to the wine-making French rather than the rum-making British colonials of Barbados.

In the seventeenth century an *ibba* or *mba* (the word *pinney* based/formed) beverage, was a common drink in the British and French Caribbean. In the early settlement period, Ligon (1657: 27–28, 46) wrote that the drink of the servants in Barbados was "nothing less mollet." The use of mollet, however, was not restricted to servants. For example, Henry Wheatley a traveler in Barbados in 1654 (cited in Connell 1977: 119) believed that the Barbadians' usual "drink is made of potatoes water." Ligon (1657: 31) also

write that molotov was the drink “most generally used on the island.” Even when appreciated the name of molotov in 1631, Boudich/Von Lichtenro (cited in Gaudel and Hamlet 1979:113), a German indentured servant in Barbados, noted that “the country make a drink from the potato root” and, in 1634, French priest Antoine Rapi (cited in Hamlet 1979:42) described slaves at the house of a wealthy Barbadian sugar planter that included “various good meals for those who do not want wine.” Ligon, a fringe member of the Barbadian elite, also identified some of molotov. Molotov was also popular in the early French Caribbean. According to Charles de Rochefort (1625-44), a French colonist in St. Kitts, molotov made from heated potatoes and water “was the most common drink used on that island.” In Martinique, French missionary Father L.B. de Ternay (1683-1674:112) enjoyed molotov and thought it tasted similar to stout. Labat (1724:112-134) also described the widespread use of molotov, which he especially liked to mix with Congo wine.

Molotov was not typically associated with African slaves until the eighteenth century. Oldmixon (1740:II:112) made a general reference to the use of molotov by “Negroes and Slaves” and noted that slaves planted potatoes in their gardens. Molotov seems confined to the Lower Antilles and there is no indication of its use in the Spanish Caribbean. It is likely that Carib might early colonists how to produce molotov and, therefore, the lack of Carib in the northern islands may help explain why its use was concentrated in the Lower Antilles. In the mid-eighteenth century Barbadian sugar planter Griffith Hughes (1750:54) reported that “molotov” was still a common drink in Barbados. As late as 1831, a variety of “molotov” mixed with sugar, ginger, and molasses was popular among slaves in St. Vincent (Cassidy 1831:120). However, sometime in the nineteenth century, molotov became the drink for a new, similarly lower group Barbadian made, not from potatoes, but from, various varieties of low bush (Hamlet pers. comm. 1985). That usage is also found in Martinique (Grogan pers. comm. 1985).

The link between fermented sugar cane juice drinks and slaves is also strong. For example, in the earliest New World references to sugar cane based alcoholic, Las Casas reported that slaves drank cane syrup "concebidos" (aguapico) and insisted they were the primary, if not the only, consumers of these beverages. In *Memorias de Tuxtla* (1607-1670) 119-188) wrote that slaves made their own variety of intoxicating drinks from the juice that came from the boiling sugar cane leaves. Lainez (1704a) (28,331) also wrote that slaves made *pingos*, which was the "colinary" drink of slaves who worked on sugar estates. In the mid 1600s slaves in Brazil were also known to produce and market "pingos" (Silveira cited in Thornton 1992,174). In Barbados, Ligon (1687:32) listed a variety of local alcoholic drinks that were brewed *pingos* suggesting that do it may have been particularly associated with African slaves. Similarly, Hughes (1758:34) believed that *coronima*, a fermented sugarcane drink, was particularly associated with "the poorer sort" in Barbados. In 1795, an anonymous writer (1795:15) on Jamaica wrote that rum was the common drink among slaves, "but they prefer cool drink, a fermented sugar made with cane stick, agave wine, brown sugar and water." Fermented sugarcane juice drinks were also associated with Indians, especially in Spanish and Portuguese America. For example, in 1600 the mayor of Tuxtla, New Spain pointed an unfriendly attempt to curb the sale of fermented sugarcane drinks to Indians (Zavala 1958,VI:408-409). In the early eighteenth century, Nathan John Arnot (1711:115) described *pingos* as a wine that that the Brazilian slaves used to get drunk and which figured a good market among the slaves and Indians along the rivers.

Distilled rum was universally criticized in the Caribbean but, in the seventeenth century, its consumption has been especially concentrated among slaves, servants, and Indians. Federico Tuxtla (1607-1671:408-409) believed that rum was the colinary drink of slaves in Mexico. Many early laws against rum in the Spanish Americas specifically sought to curb its use by Indians and slaves. Lainez (1704a) (33) believed that *agita* was the

drink of Indians, slaves, poor whites, and mulattoes" (Chalmer 1790 II: 112) wrote, was "a strong, but not very palatable and seldom falls in the Servants List" suggesting its use was concentrated among slaves.

West-Indian whites made variety of alcoholic beverages. For example, in Barbados, in the late 1660s, Jagen (1677: 54, 55) introduced a decree of the estate of sugar planter Colonel James Dent. The alcoholic beverages available to guests included "Mistell, Beverage, Brandy, Red Dye, Drink of the Plantain, Claret wine, White wine, and Rumsack wine, Sherry, Canary, Red Rack, wine of Pinell, with all the spirits that come from England." The wide variety of drinks was itself an expression of wealth. The heavy emphasis on imported alcoholic beverages also projected elite status.

French and Spanish wine and brandy were favored by the Caribbean elite, especially in the French and Spanish colonies. According to Caribbean sugar planter Edward Long (1774: 8, 557), in "Catharina, Persons of distinction use Spanish brandy, but the lower sort a kind of rum distilled from sugar cane." In colonial Mexico, the use of Spanish wine and brandy was largely confined to elite urban centers like Mexico City, which had higher concentrations of Spanish colonials, and less common rural areas with heavy concentrations of Indian peasants (Taylor 1979: 36-37). Lober (1792: 27) included a good wine was "the use of a brand" and always kept a good supply of wine imported "from France, Madeira and Canary." The astronomical costliness surrounding the use of wine and brandy in southern European grape-growing nations and the strong symbolic meaning of wine as Catholic religious practices may have increased its desirability for wine and brandy by French and Spanish Caribbean elites.

Inside Caribbean elites the appreciated wine and brandy—Madeira and Canary—were kept as precious at the system. Barbados elites, by the end seventeenth century, Madeira and Canary were adopted to the extent the two major stores whose merchants specialized in the importation and sale of wine from these two regions (Malynes 1978: 56). The consumption of Madeira wine was especially widespread among the elite in the British

Caribbean. In part, this was due to the relatively open trade that existed between British America and Portugal after the Navigation Act of 1663 and Madras treaty of 1702. In *Martinique: Oldenque* (1746, II: 664) considered Madras “the chief stock of the island that Goodenough made Use of” in Jamaica, sugar planter Charles Leslie (1760–31) believed when French-Madras was generally “used by the better sort.” And Jamaican plantation manager Thomas Sharplewood joined D. Hall (1884–95–96) viewed Madras for important goods, but limited soldiers’ consumption (pg. 9). The island of Madras was a critical supply source for ships travelling to the British Caribbean, which probably increased the availability of Madras wine. Moreover, many believed that the hot climate of the Caribbean brought out a particularly pleasant taste in Madras wine. For example, Long (1774, II: 366–367) wrote,

“Madras wine is in great esteem there about, not only because it is cheaper, but as the greater heat of the air really serves to improve its flavor, and suit it to set up in demand in the market.” The French Caribbeaner also liked Madras wine, *Amélie aux Indes* (1734 I: 121–126, 1736–1740), a favorite drink of the upper classes in the French islands was a variety of punch called *ling gree*, which was made with Madras wine. In North America, Madras was also luxury wine reserved for their elites (Hawcock 1998).

Imported European wine and brandy were, however, expensive and more difficult to obtain, especially in the British Caribbean (Pina Uricuri, 1988 cited in Gaskin and Rauden 1970–72). When often failed to receive the long sea voyage from Europe without becoming spoiled, corrupted, or simply lost at sea. As a result, wine traders began to deliver drink among the Caribbean elite. According to Laper, there was still no planter who drank it “excessively” and noted its presence at the dinner tables of wealthy planters. However, the pattern of extensive planter wine use may be overstated. There was generally associated with poorer classes in the seventeenth century and even Laper (1657:121), usually an advocate of European products, wrote that “it is common, and therefore the less concern if” it is likely that, in the later part of the seventeenth century, the growing wealth and stability of the Barbadian planter class increased their access to imported and expensive



alcoholic beverages. Moreover, the large number of African slaves and poorer whites may have separately grown their reputations as strong alcoholic beverages in wider social boundaries. In the early eighteenth century, *Guineans* (1763: 11–12) were “no Master of any thing will now dares to drink [wine] but Colours are better furnished.” In 1792, *Reverend Robinson* (1792: 11) announced that Barbados imported more than 640,000 worth of alcoholic beverages, including wine, brandy, beer, etc., and sales, which represented nearly 12% of the value of all imports. Thus, despite being producers of rum by the end of the seventeenth century (Caribbean sugar planters regularly preferred to use expensive and imported alcoholic beverages to express wealth and status). The only real exception to this rum use was the consumption of rum punch, which, as with sangre, was an elite drink made with expensive and scarce Annapolis and other expensive *Annapolis and Charleston*.

*Alcohol use was widespread in the Caribbean and the increasing amounts of alcohol available contributed to a climate of excessive drinking. However, levels of alcohol consumption varied among social groups and these differences reflected more than simply access to spirits. As with the choice of alcoholic beverages, levels of drinking and drunken comportment helped express social group identities. The drinking patterns of particular social groups also conveyed messages about the underlying tensions that existed in these societies, which were driven by the constant negotiations of labor and not unlike a highly contentious social hierarchy based on class, race, religion, and ethnic identity. Moreover, these tensions were magnified by epidemic disease, poor living conditions, natural disasters, international conflicts, and unstable food supplies. While nearly everyone in the Caribbean consumed alcohol, the differing levels of alcohol use by various social groups provided a rich opportunity to explore the ways in which drinking became a physical manifestation of, and a response to, conflict, identity.*

*Early written post is completely silent of slave drinking. The lack of first-hand reporting by slaveholders is likely heavily on their perceptions of slave alcohol use. In*

the 1830s, for example, Wesleyan missionaries Adolph Behr and a companion "never had less care of the crops of the negroes" (Thorne and Kupperl 1839:56-57). However, white-based ideas relating to laboring, a dimension of consciousness that dominated the social order (Fried 1994:264-275) in addition. Caribbean slave societies were based on the systematic and highly structured extraction of slave labor. Thus consciousness of the negative impact of excessive drinking on work performance frequently related white fearfulness of slave drinking.

In their efforts to maximize plantation efficiency, planters contributed complex stereotypes about the contributions of particular African ethnic groups. Often these stereotypes made reference to drinking behavior. For example, Cécile Laroche de L.R. Maréchal-Bass (Méry) (1793:96, 148-49) believed that slaves from the Gold Coast were drinkards. In contrast, Méry considered slaves from Senegal, despite being influenced by Islam, very abstemious. In Jamaica, Long (1774, 1802-03) described Gold Coast Africans "very quarrelsome, causing disorderly trouble, addicted to theft and dishonesty." Long (1774 [1775]) described slaves from Angolans and Benagué as "a barbarous race, hardened in slavery, well suited to human blood, cannibals, drunkards, practiced in hideous oppressions and fraud." Planners knew that a West African work force was a more efficient work force and, therefore, had practical economic reasons for observing the drinking of particular African ethnic groups.

Stereotypes about the drinking habits of particular African ethnic groups likely influenced the planters' decisions to assign slaves to specific alcohol-related tasks. For example, Long wrote:

Negroes plant slaves plough & vine (the total effects of . . . [a]ssessive rain is strong), than the general appearance and certainly cost of most of the white men and Negroes employed in the distilling houses, when as they can supply themselves freely without restraint, so they will manufacture quantities of rum distilled from guinea, guinea, and from the sugar.

(Long 1774[B 137])

Slaves from ethnic groups with abstemious reputations were probably strong candidates for work in and around plantation distilleries. This may help explain why, for example, De



French/Caribbean sugar plantations to employ female slaves and indentured white men because 'women are less subject to drink.' Apparently, they did not heed Lefebvre's warning, and, for example, in 1768 the two slaves disturbed at both Bromfield and Colthard du Port estates in Saint Domingue were men (Delon 1974/197 108).

However, excessive drinking was not confined to men. In 1778, John, a domestic slave who worked in the great house at York House, Jamaica, was also described in the slave lists as a "drunkard" (COPP). In 1796, the Deputy Inspector General to Hospitals in Barbados, Dr. George Foulard (1806/182) wrote "both [slave] men and women are very fond of rum." In the late-eighteenth century, one of the most popular musical songs among slaves in Jamaica was about "a drunken Negro woman who used to get drunk early in the morning" (Anonynous 1797 89). Barbadian sugar planter Richard Hall (1788 13) noted, "most of the negro women and many of their children drink rum." He was even drinking among children especially named *Jamaica rum* (after Thomas Buxworthy before visiting slave children).

about [have a plentiful] pot of rum, while vegetables boiled for them every day distributed to them sparingly before the evening, or breakfast, with a wine glass full of uncoloured sugar beverage; and a bowl of good rum to each, as an indulgence. Their minds should always be kept cheerful.

(Wright 1821 122)

Drinking patterns disrupted internal social divisions within the slave community. For example, Collins (16 11 50) argued that overly stressed African slaves "are excoriated to habits of intemperance, and here daily confinement to hard labour." In contrast, Creole slaves had a reputation for temperance in some places. Long argued that the sobriety of Creoles in Jamaica was another aspect of the extensive drinking of white classes of whom,

The Creoles, as general, are more exempt from intemperance, that parcel of negro nature! I have known several who have rejected every sort of spirituous liquor with feelings, and would drink nothing but water. If the Negroes could be induced soberly to live the rest of years in their youth they would probably never become very fond of strong drinking afterwards. I have often thought, that the laws under which they live on the plantations to take up the detestable pictures of drunkenness, that the better sort of amiable Blacks have rather more well disposed to in practice the excessive self-abuse effects (drinking) so have experienced less most of a kind of

grade, and they would appear superior in, and more responsible than, such lowly white workers. In that it is easy, there is nothing nearly as more degrading to them than this voluntary opportunity for manual toilsome, deprived of which, he sinks below the lowest rank of slaves.

(Long 1774 II: 409)

Longtinously believed that some Creoles actively changed from clerical to part of a broader social strategy to distinguish themselves from poorer classes of whites. Miles A.C. Carmichael (1803-1796) a master to St. Vincent, wrote, "I have concluded that the colored men are by no means genuine abolitionists." *Memoirs de Saint-Vincent* (1795/96) 462 also believed that the mulatto Creoles of Saint Domingue were "very subtle" suggesting that temperance may have been a way for non-white Creoles throughout the Caribbean, first as a means to define their identity, particularly in their relationship to newly arrived African and poorer classes of whites. Although male Creole slaves were generally employed in specialized and skilled jobs, Saint Vincent may also help explain why, in the late eighteenth century, the free slave dwellers at Windley Park were in fact non-white Creoles (Cotton 1897: 112). That reality, however, was obscured by the Creole abjectness and many whites simply believed "New negroes, but not men are much addicted to the use of spirit" (Cotton 1811: 58).

What then about drunken slaves frequently led to legal restrictions against slave drinking. In 1692, the Barbados Assembly passed an act "prohibiting the selling of Rum, or any Strong Liquors, to any Negro, or other Slave." The act stated,

Whereas many Drunkenness have been committed, and Mischiefes hath ensued occasioned by Negroes and other Slaves when Opportunity has been given of meeting and receiving Drunken Rumor: That whereas Persons or Persons after Persons have sold, shall sell any Rumor any other Strong Liquors to any Negro or Slave, or any other person for the use of any Negro or Slave (and being convicted thereof) by the Oath of any Christian before the next Justice of the Peace shall forfeit Twenty Shillings for every

(Barbados 1692-1693)

In 1692, whites in Barbados had discovered and created a proxy slave trouble. The purpose of this particular act was, no doubt, imposed by threatened slave revolt (Barbados

1899 [8-40]. Colonial intervention throughout the Caribbean period resulted later during the slavery period, but, according to Collins (1811: 18-19), "it is to be lamented that more effectual means have not been employed by our colonial legislatures to prevent [the slaves'] easy access to rum." Rum was abundant and so deeply ingrained in the social fabric of Caribbean slave societies that slave laws were "easily and often evaded" (Kleinman 1984: 81-82).

In today's slave drinking in the Caribbean was probably no more universal than that found among most other social groups. Rums drinking among slaves appears to have been confined largely to occasional occasions, weekend events, and plantation holidays. Thomas and Ayala were the only slaves used at York House for regularly entertaining at school, and York House had 180 slaves. This suggests that excessive drinking or alcoholism, if we can call it that, was not widespread. However, as a cook and a domestic in the great house, Thomas and Ayala were in more frequent contact with the planter and overseer than most of the other 168 slaves on the list who were, for the most part, field workers. In contrast to the field slaves, if the work performance of a cook and domestic suffered from excessive drink, it was likely to have been noticed and recorded. Thus excessive drinking may have been more widespread at York House than can be gleaned from slave lists. Unfortunately, non-plantation managers, including those very notorious managers at Windley Park Jamaica, failed to record alcohol abuse on the slave lists, which has diminished our understanding of slave drinking (Crisis 1978).

The frequency of interaction between slaves and whites in Caribbean towns may also help explain why some urban slaves were characterized as being prone to excessive drink. For example, according to Dominican sugar planter Thomas Armand:

The negro-system we at present have is, besides our that we have set of people, and not only a policy of much importance especially to strangers on their arrival at the islands. They are necessarily the richest and most disposed negroes belonging to white people, or to free people of colour or other towns, and pay their owners a certain weekly duty, but many of them will spend every the whole of their earnings or spend a whole year on the gratification of their masters.

(Armand 1791: 288)

Urban domestic in Bridgetown, Barbados also had a reputation for “drinking, dancing, drinking [and] gambling – which every night most of the streets stretch the ground” (Dickson 1789-94). Urban slaves had more leisure time and increased access to alcohol in the many taverns that dominated Caribbean towns. However, the drinking of slave parties, as with domestic, was highlighted because of their public presence in areas heavily populated by whites.

Per capita rates of rum consumption among plantation-slaves were not accurate. Labor estimated that plantation slaves annually consumed 34 gallons and accounts from York estate, Jamaica indicate an annual rate of 1.8 gallons per slave. Brewster, in Barbados, British Hall estimated an annual per-capita consumption of 3 gallons of rum. These rates are not excessive by modern American standards. In 1995 the per-capita consumption of alcohol in the United States was 2 gallons, equal to about 4 gallons of proof rum (Boschough 1979-2002). These figures are even less intimidating when placed in the context of North American drinking patterns in the seventeenth and eighteenth centuries. In the first decade of the eighteenth century, North Americans consumed an annual average of 2.3 gallons of absolute alcohol and, in 1770, an annual rate of 3.5 gallons (Boschough 1979-2002). Furthermore, these estimates are well below that of the great alcoholic binges of the early nineteenth century – which reached levels of 3.8 gallons of absolute alcohol equivalent to 7.6 gallons of proof rum (Boschough 1979-2002-2003). Nor are these estimates particularly remarkable when we consider the high proportion of white males in Caribbean slave societies, generally considered the heaviest alcohol consumers. However, to get plantation figures also may account for distribution of rum rations and not necessarily that acquired through purchase. Rums, around, is allotted on special occasions. Moreover, these figures account only for the use of rum and not other alcoholic beverages, including fermented sugar cane drinks, which were frequently mentioned as being made by slaves.

Evidence from a number of archaeological sites highlights drinking among plantation slaves in the Caribbean. For example, excavations conducted at Maple Cove in

Dr. Philip Parake (Barbados). Oral traditions suggested the most recent located stores from Bayley plantation and this led archaeologists Jerome Handler and Fredrick Lange (1972), in the mid-1970s, to explore the possibility of store occupations at the site. After initial testing, they identified excavations at Maple Cove for excavations at Newton slave cemetery. In 1978, excavated remains in the Maple Cove site led to investigations under the direction of myself and L. Daniel Munro from Virginia Commonwealth University. Surface artifact collections and test surface testing revealed that African slaves had occupied Maple Cove in the late eighteenth and early nineteenth centuries (Olsen and Smith 1999, 2000). Green-tinted jar bottle glass dominated the surface assemblage at Maple. However, glass bottles were not the only containers used for holding alcohol. In 1777, an anonymous informant wrote:

When they [Africans] arrived, they have different ways of carrying these wares, the most common method is a milk-bush bottle, stopp'd with the wares on which Indian corn grows. A cane is sometimes used for this purpose, to fix a tin which they draw in of the middleman, it like gourd and such other parts and a large cane will hold a considerable quantity, and serves the double purpose of a bottle and a walking stick.

(Anonymous 1777: 16)

The plaster also had a reputation for excessive drinking. Descriptions of the various alcoholic beverages available to guests at the plantation while visited the structure which alcohol permeated plaster-infused. Drinking was a crucial facet of entertaining,

especially national dignitaries. In 1851, Olin Edwards (Smith 1976), the brother of Barbados sugar planter Cassius Edwards, wrote *A Brief Description of the Island of Barbados* in which he described the large house culture of excessive drinking among the planter class (Edwards 1851: 10).

As with slaves, our understanding of planter drinking is skewed by the nature of the witness: many of whom were members of the elite class. They found little fault with what they perceived to be "habits" of planter and expected much greater of their colleagues. Lange believed the planters of Barbados were "blessed of good habits and pure." Another factor contributing to this gendered perception is that planter drinking was usually confined to



relatively private events, most likely to occur in the estate great house than in the public streets and taverns. According to Othobon (1741,8:107), "the Government of Gentlemen in the Islands are most rather Drunk." However, certain writers romanticized the drinking customs of the elite.

The Gallant People [of Barbados] delight more in Balls and Concoets, the good Fellows, in Drink and good Company; and though our world-improvers, that Men should be allowed to drink such a hot flagg should condemn 'What is Madnes, to such other Country, yet it has been knowen that some of them have drunk their five and six Bottles a Day, and hold place for several Years.

(Othobon 1741,8:107)

The common image of "The West India Sportsman" (1804) points first at the extensive customs of drink and officers of the British Caribbean plantation class. In the illustration, the planter's beverages include rum, locally brewed rum punch, and numerous imported and imported bottles. One small jar of water amongst the alcoholic beverages may have been meant to further emphasize planter indulgence. Engravings scholar Blair's nineteenth and early twentieth-century great house is the Barbadianed architecture is conclude that the engravings "intended more to convey than to present evidence"

(Parramuth 1996:17)

In general, writers had a reputation for heavy drinking. In Barbados, Thomas

Widdick wrote,

There is always carried to the Church 10 or 12 Gallons of rum, wine or a pint full or 2 of this punch is offered the people (for a special service makes them squariously when as soon as the songs are done if they are round the Lapin or the Church people drink to the company of the defunct, drink and drink what they are about, as follows

(Widdick 1718 Reprint in Council 1963:2)

In 1821, Sir Henry Colt wrote to his son at length about the moderate use of alcohol among Barbadians. During a visit to Barbados, Colt stated,

You are all young men, and of good drink, if you would but take ye measure of drinking, together with ye judicious conclusion of your fiery spirits. You are dissipated up of hot waters and each good draught denied, ye I am persuaded a drop of good liquor takes the worth would not return from you but in diluted hot water, (ye thought as well cold) 3, to ye nature of the hot mixture of pump and for your company, was brought from 2. Distance of hot water, a shade, 4, 30 and one five drops if I had continued the correspondence, I don't know I should have been brought to ye measure of 60, but ye would of all was your miserable quantity.

That young and lusty bloods should not have syle whettinge we must ye thanke,  
but rather wold want to spende it.

(*Coloss* 1811: 45-46)

Probably no other group in the Caribbean had a worse reputation for excessive drinking than colonial servants and other poorer classes of whites. For example, the Governor of South Carolina, Joseph West, complained about the drunkenness of Barbadian servants and requested that no more be brought from Barbados. In the late seventeenth century, West (written Bridgetown 1702, 1704) wrote: "We find that one of our servants was brought out of England is worth two of the Barbadians, for they are so addicted to rum, that they will do little but relieve a bottle as it does them." Some poor whites in Barbados were known to steal rum from sugar plantations (Jackson 1739: 42). Excessive drinking among poorer classes of whites was not limited to Barbados and, for example, Long (1774: 81, 295) argued that, in Jamaica, some servants were responsible for "causing violence among the white people is generated by their drunkenness."

Colonial Assemblies occasionally attempted to curb drunkenness among poor whites under Caribbean law. Moreover, the colonial Assembly prohibited plantation owners distilling all of their own juice into rum to reduce white drunken violence on the island. The colonists, when drunk, apparently called out another derogatory name like "English dogg, Scots dogg, Boy, Irish dogg, Canadian and Roundheads" (cited in Grant 1873, 125). Masters in St. Vincent were prevented from distilling their own sugar for the rummer rummer (*Coloss* 1811: 100). In 1802, officials in Barbados believed that excessive drinking caused much social mischief across the island. Assembly felt compelled to pass an act that greatly regulated/restricted the sale of spirit. The Barbados Assembly declared:

Forasmuch as it is observable that in Barbados as in other Islands the consumption of rum and increase through the multiplicity of such Adversarial Dealers is continually bad and worse in Order of Flogging Houses commonly called Broads, or Free-Houses, which are for the most part distant and remote from all broad paths or high ways whereby the keepers of such Houses take advantage to Trade and Deal with servants and Negroes for Spirit Goods contrary to Law, and to the great Oppression and Damage of House and Indigent People.

And Whereas on Sabbath Days many Laced, Laced and Idle People do usually assemble such Flogging Houses, who by their Drunkenness, Swearing and other Misbehaviors, do not only give offence, but also to the Honor of God.

prophane for Sabbath, and bring a great scandal upon true Christian Religion for profanities related to the feast.

(Bacon 1609: 71-72)

In 1613, the Assembly (Hansard 1613: 33-35) passed a similar Act against "drinking and the profaning of houses to dishonest taverns and visiting houses. Among the regulations were fine for drinking and visiting upon during "the time of Divine Worship or service." In 1634 the Colonial Assembly of Connecticut wrote, "We know the day of the Lord in Congregate the day of Recheat." The Assembly enacted restrictive laws and mandated "That on that day no drinking houses shall be open or drinking house shall place" (Goodridge 1983: 302).

In contrast to first-century thinking of white men, white women in the Caribbean were more temperate. Lopez, while trying to explain the current state and rapid spread of disease in Barbados wrote

Whence it were brought rather in sleeping, ... as by the state of the people of the island, who by the ill days they keep, and drinking strong waters, bring disease upon themselves, was not commonly known. But I have reason to believe the latter because for our women that stayed there were few sick.

(Lopez 1607: 21)

William Jackson (1787: 14), a visitor to Barbados, wrote that the "necessary sobriety [and] fidelity" of white women excluded "dances [and] much merriment." According to Long (1714a: 218), while Creole women in America were "temperate and abstemious in their diet rarely drinking any other liquor than water." Their good health, Long (1714a: 224) wrote, was due to "their less exposure to heat and heat exerts in the sun, less subjection to intemperance, and late hours." In Barbados, Atwood (1751: 212) also wrote "What is very remarkable are the English Creole women for sobriety and chastity, that as the first women very few drink any thing but water, or beverages of less juice, water and sugar."

Examinations were also made concerning the drinking patterns of freedmen and free. Long (1714: 11-20) believed the Jews of Jamaica were particularly intemperate and "may be supposed to use their good health and longevity, as well as their fertility in their very opening use of strong liquors." Anthropologist Mark Kofas (1979) has argued that the

potential spiritual importance of alcohol in business resulted in a healthy respect toward alcohol and an otherwise difficult drinking pattern. Long (1774:8, 26) wrote "The free Negroes and mulattoes that rather border on respect of eating, and are not so voracious [as Jews] in splendour of papers, for both men and women are frequently associated." Long also believed that, compared to European laws, the American's unconcerns softened their laws. He noted, "the natives where in this island I mean such of them as are not addicted to drunkenness, nor have any licentious disposition are equally long lived [as Jews and otherwise freemen]" Yet not all whites were freemen as contemporaries, Beckwith (1789:102) described the freedom of Barbados as "rather an indelicacy."

The drinking habits of specific European colonies were also commented. Long (1774,8:222) took notice that "natives of northern Scotland [were] particularly sober and frugal" which may help explain why they were frequently employed as draftsmen on sugar plantations. Latham (1714, 115) wrote, the English in the Caribbean, "remained long in their taste of drink where we ourselves are restrained as the French, who are always very select imitators of the worst habits of their neighbours." Moravians (East India) believed (1790:5,50) "The temperance of [Spanish/Caribbean Is. Is. Is.] is quite remarkable in their drink which is generally water." According to Long (1774:8, 307) "to make sure, that the individuals [of Jamaica] would be equally proof against attacks [alcohol], as the Spaniards are found to be, if they would but digest a little more than a few plentiful drinks, and strong liquors." Yet, according to Long

Among the Spaniards in Carthagena, the use of spirits is so temperate that the most regular and sober persons never cease drinking a little glass every fifteen or thirty minutes a clock, allowing that it strengthens the stomach, weakens the passions, stimulates perspiration and sharpens the senses. Hence has come, I'm sure the advice that is, to drink a glass of spirit, is the ordinary medicine that the surgeons, which is not without foundation when used with moderation has discovered and with many being the fond of it, that they do nothing the whole day but drink but never get over it. (Long, 1774,8:350-351)

The Dutch reputation for excessive drinking was legendary and "The pipe and the bottle were the inseparable companions of the Dutch merchant as they were in the United

*Forastero*" (Drew 1903: 234). In 1831, an English colonist even described Jan Christian Van Campen, the Dutch commander of St. Maarten, as being the "only sober Christian" he had ever come across (Pruett 1965: 234).

Soldiers in the Caribbean also had a reputation for excessive drinking. Many societies have adopted liberal attitudes toward alcohol use among soldiers. For example, among the privileges given to the *Regios* (Kishinevian) women carriers behind the front to drink alcohol (Carnegie 1979; Maltz 1971: 3). In the United States, the age restrictions against alcohol drinking do not apply to personnel on military bases. Akyempong (1998: 28–29) wrote that, in the nineteenth-century Caribbean, "Warfare diminished the social importance of wine *versus* no alcohol" and rum had become particularly associated with the war zone. The liberal attitudes toward alcohol use reveals that societies recognize the greater realities that confront soldiers.

Liberal attitudes toward drinking were also present in Europe as the Caribbean and alcohol became regular part of life for most European soldiers and visitors stationed at the numerous forts that dotted the Caribbean landscape. Rum was considered a necessary ration, especially in the British army and navy. The growth of the British navy in the seventeenth century due in large measure to the outbreak of New World colonies, led to the widespread implementation of rum rations. Rum had first been recognized as a common salubrious product, and Parliamentary measures aimed at promoting the growth of the Caribbean colonies.

Drinking among the soldiers and sailors stationed at the Caribbean was considered excessive. Prior to an attack on the Spanish Caribbean colonies of St. Kitts and Nevis in 1694–1695, the Penn and Venables expedition looked up with rage at Barbados. However, troops and commanders from Barbados and St. Kitts had neither had reputation for drunkenness nor Venables blamed them for their defeat at Plaquemine (Drew 1903: 281; Long 1774a: 407–413). By the end of the eighteenth century, many British troops were receiving as much as a pint of rum each day (Jenkins 1958: 246).

Kupperman (1996:468). Peck (1903) wrote that an essential secondary life in the Caribbean that commanders often feared involved the mixing of slavery failed to provide troops with their daily income (Faulkner 1979:327). Archaeological excavations conducted at the site of the early nineteenth century St. Anne's military garrison in Barbados have unearthed numerous wine bottle shards, which attest to the importance of alcohol use among troops (Alyce Davies 1998). Drinking among soldiers stationed in the Caribbean became such an extreme social problem that troop-commanders often placed restrictions on rum drinking and tried to minimize how alcohol could be lost and misused (Faulkner 1979:105, 1998:366, 387, Grogan 1979:84). In 1740 Captain Edward Vernon, infamous for his role during the 'War of Jenkins' Rag, was concerned about the excessive use of rum among his soldiers in Jamaica and ordered rum rations mixed equally with water. This drink, known as grog, was named after Vernon who was nicknamed 'Old grogram' for the waterproof hat cloth he wore. Although drinking was excessive in the military, one exception was those more discerning military men, usually British, who came to the Caribbean with their wives and children (Long 1754, 18:306-308).

Alcohol use was a central feature of military communities and excessive drinking among Caribbean marines and seamen was legendary. If new marines and seamen were not already familiar with rum as a beverage, they were quickly introduced to it on their voyage to the Caribbean. Upon arriving into the tropics, those who had not done so before were required to go through a long-standing tradition of "drinking" or "tipping" to honor Neptune, the great God of the sea. The drinking included the consumption and offerings of rum as a means of alcohol, usually rum, as well as a traditional sharing (Faulkner 1988:84-85). The first crew member or passenger to speak also received a bottle of rum (Faulkner 1988:79). Celebratory toasts were occasionally heard throughout marines and seamen from ships and taverns in colonial port towns. For example, in 1709 the Governor of Curaçao banned the sale of liquor to sailors in Willemstad after 4:00 p.m. The punishment for breaking this law included the loss of pay for three months and 15 days in

gal/Corbridge 1985: 335). In Barbados, their excessive drinking and bawling led to such great moral that, in 1603, the Barbados Assembly passed an Act prohibiting women from drinking to excess after 11:00 p.m. (Barber 1989:7). Hall (1755: 11) estimated that rumour estimates in Barbados consumed about 54,000 gal/ton of rum per year.

Peons, housemen, and prisoners typically came from maritime backgrounds and also had a reputation for excessive drinking. Many were former merchant seamen and their recreation is a national story. A sample of 700 men selected for peony between 1688 and 1693 showed that 71% described themselves as seamen or sailors (Corbridge 1997: 35). Excessive drinking was typical of Caribbean peon society, which in the late seventeenth century were known for parties, housemen, and prisoners. Before being sent by the carpenter of 1692, Port Royal, Jamaica was a center of party activity. According to Long (1774: II: 140): "The town was inhabited by scarcely any other than merchants, tradesmen, lawyers, victuallers and residents of party by [and] the late were numerous, and well supported by the housemen: who designated town whenever they got from the Spaniards." Ellis (Devil Hills, North Carolina, made us a comment on notorious parties, like Blackbeard and Steve Bontant, who asked the names and customs of the Caribbean drinking full-sized rum and smoking ships.

The French pirate Jean Lafitte wrote: "no amount of gold or silver could ever give me the pleasure of a single glass of hot rum consumed in the spirit of my nation." Blackbeard was said to have consumed a half-gallon of rum per day (Corbridge 1997). In one of his drunken episodes, Blackbeard shot his ship's quartermaster, James Beards, to the knee and supplied him for life. Robert Johnson, a pirate on Barbados in Barbados, once when given "deliciously drunk that he had to be locked out of the ship with the aid of a Black and white." Among the most famous Caribbean pirates was Captain Henry Morgan, who in the mid-seventeenth century challenged Spanish control of the Caribbean and helped consolidate British colonization. Morgan's reputation for excessive drinking was legendary and it eventually led his physical decline. The physician who treated Morgan

during his last months of life diagnosed him as "liver, spleen-enlarged, his eyes a little yellowish and belly getting not prominent," symptoms typically associated with jaundice and liver carcinoma (Crosby 1997: 43).

As early as the nineteenth century, parties were reconstructed part of Caribbean lore. Poles Latta, for example, held a place, or *brasserie* *brasserie*, in which the participants were required to follow brasserie traditions, which included the consumption of large amounts of alcohol:

While the song was ringing, those who wished to do so, as was invited, they were also permitted to drink a shot (a cup) of wine, provided that they drank it in a wine (traditionally) without water. For brasserie-makers pour water into their wine and drink when just water is just liquor. Some however, there is no rule so strict that it does not allow some transgression: some of the company are allowed to mix water with their wine. This a libation, being still members of the Order of Brasseries, it would not be wise to refuse all the request of the host. Hosts who brought nothing were not to grieve if they said they had sent nothing, for were told that they must go back and collect something or pay the last penalty. If they were old brasseries they were punished on the spot by having to drink as many shots as were after the other in the most successful before last brought in forth. The only remedy that can be shown there if it is provided last libation and not a libation has been the cause of these games, is to give others the choice of the liquor that they have to drink – I do not think it necessary to inform the reader that one of the most frequent diseases a brasserie [brasserie] is to drink frequently. The first example is, the (last) most common one to drink and few are other aspects. The diseases were then the sentence by drinking the large sum, a sentence pronounced, since that case is always kept full of wine. In that instance, however we spend the day with the greatest possible enjoyment.

(Latta 1870: 12-17)

In the twentieth century, popular culture continued to solidify the links between parties and rum. This connection was articulated in Robert Louis Stevenson's "Tropicana Island":

Follow me now that man's dead  
To his bed and a bottle of rum!  
Drink and the devil had done for the rest  
To his bed and a bottle of rum!

(Stevenson 1985: 11)

The iconic painting makes Caribbean rum-binders, including Cayenne Morgan – *Old Begonia* – and December silent to the consuming consciousness:

Many factors contributed to the extensive use of alcohol in the Caribbean. As mentioned in chapter 4, anthropologist Donald Bédoin (1941) examined the historical links



between excessive alcohol use and anxiety. Surveying the Hansen-Edwards Arch File (HEAF), Horton argued that high levels of drunkenness in a society corresponded with high levels of anxiety. Horton specifically addressed excessive drinking among hunting and gathering groups in order to show a correlation between drunkenness and the common substance abuse of hunting and gathering societies. According to Horton, excessive drinking functioned to relieve aggression and tension caused by the anxiety. While researchers have challenged Horton's anxiety theory on hunting and gathering societies, the basic premise of Horton's model remains strong (Fick 204). McDielland (1973), Horton eventually repositioned the anxiety caused by an unpredictable existence and the potential for solitary and constant danger back toward groups in drink excessively. Anxiety models have been used to explain excessive drinking on a number of historical and cross-cultural settings. For example, in 1870 anthropologist Peter Schaeffer used HEAF evidence to show a relationship between societies that have moderate seasonal spirits and excessive drinking. Rivers (1906) argued that excessive drinking in the early American Republic stemmed, in part, from the anxiety of post-Revolutionary Americans trying to achieve their great ambitions and economic goals, but also lacked the motivation to pursue those goals. Alden argued stimulated the excessive drinking of migrant workers in the early twentieth century Gold Coast, to anxiety caused by separation from land and labor.

In the Caribbean, excessive alcohol at the most basic levels of life, epidemics, diseases, natural disasters, inadequate food supplies, and excessive drinking were all contributed to excessivity in the New World. For example, in Barbados, in the 1640s Legon (1677:23) wrote, "At the end of our apparel and a month or two after, the epidemic rage'd so furiously, as the living continually bury the dead. That epidemic is generally thought to have been the first epidemic of the Antiquary of yellow fever, a devastating disease for Europeans (Warr 1983:15-16).

Yellow fever begins with headache, a swollen throat, and burning fever. It can kill quickly in severity, but is chronic: your eye-eyes become inflamed, status in experienced and pain in the muscles and joints. The pain is usually lighter than in comparative mending sets in. Headache and delirium may appear. Initial heat

characteristic symptoms are a falling pulse accompanied by continued high temperature, the vomiting of partly digested food, and in the later stages, generalised haemorrhage.

(Coggins 1942:347)

Symptoms of yellow fever were frequently registered in plantations close to or from and usually related among the most common causes of death for plantation slaves in the Caribbean (Jagoe 1984:239-247). However, writers were especially vulnerable to yellow fever. Thousands of white colonists died during the Barbados yellow fever outbreaks mentioned by Legue (Clibborn 1826:209-240). Higman (1984:161), Schomburgk (1848:93). Yellow fever was a permanent part of Caribbean life until 1900. Famine and drought often compounded epidemic diseases. Early yellow fever epidemics occurred throughout the Caribbean, including Antigua in St. Vincent in 1685, Port Royal, Jamaica in 1692, and Port au Prince in 1770. Between 1492 and 1893, 174 hurricanes were reported in the Caribbean, the worst being the hurricane of October 1780 which killed over 22,000 people, mostly in Barbados and Montserrat.

The situation caused by poor working and living conditions also spurred excessive drinking. In 1948, Fradette/Coggins reported that heavy drinking among the working classes of Europe was a byproduct of the dehumanising effect of regimented labor systems within the context of industrial capitalism. Excessive wine consumption resulted as a consequence of the poor working and living conditions. Alcoholic workers got drunk as part of a broader strategy of escape. In Russia, just prior to the 1917 Revolution, physicians and anti-alcohol militants also blamed the excessive drinking by the working classes on environmental factors such as low wages, poor housing, and isolation (Jensen 1988).

In the Caribbean, white colonisers actively discouraged dehumanising labor systems. Contrasted to work for them in seven years, they could be bought and would be the distance of their contracts and their labor increased through coercive means. Whereas slave workers in Europe could be assimilated into a family, in the Caribbean their labor was strictly a commodity. Slaves had to contend with hard work under the tropical sun and often the superintendence of violent punishment from a cruel master. The goal of many

servants was indispensable and the opportunity to become planters if they were able to survive their indenture, but large planters quickly realized up-good looks making such dreams frequently unattainable (Garrison 1981). These challenges and frustrations created an economic climate in which alcohol provided a means of escape. As a result, Indianism and Christian missionary W.L. Garrison viewed up the status lives of poor whites in the Caribbean.

The debasement of local servants was at its end, but large supplies of young men could be found to work for others. If circumstances combined, these men could suffer on reaching the colony equivalent to gold. But to a young man accustomed to a sheltered, quiet home, the shock must have been very painful. He found he had no friends to keep, but that his duty consisted in following the gaze of others to the field in all weather, and superintending their labors there as in the home and still house. He was thus exposed to the influence of heavy down, sudden showers and burning heat. No wonder that large numbers soon fell victims to the climate, so that, apart from their crushing sufferings and various female society, many lived a life of extreme debauchery, night after night, and day on the Sabbath day. Now men and yellow livered turned hundreds yearly to an untimely grave.

(Garrison 1871:176-179)

The excessive drinking of planters might also be related to their specific situation. The planters' goal was an eventual return to Europe in luxury, but heavy debts and low returns from their plantations meant that, for many struggling colonists, the return to Europe in luxury was unlikely. Anxiety prevented the lives of Caribbean planters who found comfort and excitement from the means of African dress and white servants. The unpredictability of downed servant uprisings and percentage-based wages pushed Caribbean planters to seek escape in excessive drink in the company of their peers.

African and Caribb slaves showed alcohol to confirm a terrible Caribbean society. However, many had other, less self-destructive, outlets for the release of discomfort. Schefler (1999) has argued that moderate drinking is common in highly structured societies characterized by paternalism and respect for hierarchical authority. Paternalistic theories could certainly help explain moderate drinking of many slaves. However, the slave community itself also provided a stable social setting that may have mitigated many emotions. As with Caribbean laws, African slaves came from societies with a healthy spiritual respect for alcohol. Except during holiday celebrations, the ceremonial aspects of

drinking may have assumed secondary to the intrahouse and community strengthening work of alcohol. The importance Long and Murrells de facto likely awarded for Creole slaves suggests that they may have developed an especially good coping strategy due to their greater familiarity with the domestic environment and their ability to act as upward social mobility. Moreover, Creoles were likely to perform less arduous types of work on the plantation. In addition, Creoles were likely engaged in strong kinship networks that probably served to lessen the effects of some sanctions and, thus, reduce levels of excessive drinking (Giles and Pratt 1992 64–88). These factors helped make life more palatable and create a greater sense of stability, which would have reduced the need for alcoholic escape.

The importance Long awarded to Creoles makes it difficult to explain the numerous drinking he awarded to freedmen. Freedmen would have been as likely as Creoles to use to have developed strong family ties and kinship networks. However, freedmen were also in a tenuous position within the slave system. This boundary put them in a precarious and socially unstable position between the worlds of free whites and enslaved blacks. Moreover, freedom did not necessarily result in a better material condition or economic independence. The dominant white power structure of the colonial Caribbean rarely offered such opportunities. Thus, as with white women, difficulties and limitations may have contributed to higher rates of excessive drinking among some freedmen. In addition, they were anxious of their own trials and had the freedom to get drunk. However, Long probably overestimated the antipathy of freedmen. Excessive drinking is ubiquitous, freedmen often were “sober and industrious” (Dickson 1789 92, Hunter 1794).

### **Race and Ethnicity**

Race and color obviously have long had a major impact on the health of Caribbean peoples. Excessive drinking often compounded existing health problems and added to the stresses already rampant in the expatriate environment. Analysis of hard drinking also highlights contradictory beliefs about the meaning alcohol. On the one hand, some Caribbean women are seen as so indifferent and so close to life, while others worried about

managers run drinking and rain management as the cause of much illness. The Africans and Europeans who visited the Caribbean brought with them Old World notions about the healthful and perils of alcohol use. In Europe, distilled wine (*vin de vie*) and gin were viewed for medicinal purposes and, before Christian symbols linked alcohol to fertility and rebirth. Yet, Biblical references also warned about the dangers of excessive drinking and early modern Europeans often saw drunkenness as a deadly sin (Russett 1991). Coney 1996, Maxwell 1993: 16, Thilly 1987). In West and West-Central Africa, alcohol also possessed contradictory health meanings. Akanized traditions, for example, grew palm wine into life-enriching questions and made it a vehicle to ancestral healing. Yet, the same oral traditions also warned that excessive palm-wine use and role playing contributed to tragedy (Gyomampong 1994:26-27). Beliefs about the dual nature of alcohol were transferred to the Caribbean and, despite cultural traditions that associated alcohol with drink, management was criticized.

European and African notions about the need to maintain moist body heat increased the demand for a hot spirit like rum. For example, in Barbados, Lagos (1688: 27) wrote: "certainly strong-spirits are very requisite when so much heat is lost for the spirit being exhausted with much sweating, the inner parts are left cold and flaccid, and shall need comforting and warming." Edward Long of Jamaica wrote:

A Barbadian caught cold once by the quick evaporation of his natural warmth, perceived his body chilled and suppers it is usual here to sleep and rub oil over with rum, and then put on dry clothes which preserve us up all winter long. (Long 1774,3: 326)

Beliefs about the body heat-enriching qualities of rum led many planters to distribute it to servants and slaves during damp spells and bad weather. Fisher de Texeira (1767: 167) ARJ wrote, "slaves should be given some rum, especially when they do hard work, the refreshing tobacco is strong rum." Lagos (1774,3: 331) advised giving slaves rum when faced to "rub it in the rum." Barbadian planter William Bygones (1781: 67) wrote, "In wet Weather give Rum to such Negroes very Morning, and in other Times as you shall see

continued, according to John early King, of the Workshop are about." Collins (RED 101) prescribed rain to slaves: "during the wet weather and while the negroes are engaged on very laborious work, such as hoeing." In 1788, Domenico Parry of Barbados (listed as Doctor White, and Wright 1998:81) told Barbadian "There is always every plantation a proportion of Rain, Sugar, and Molasses, reserved for the occasional Use of Slaves in damp Weather, and the more difficult Work." In 1790, Axtell (1790: 282) wrote that rain and water were given to slaves in Dominica "especially after having been in the sun." Roughly (RED 101), describing the value of good management thirty years later wrote "In hot weather a glass of good rum, should be given to each [field slave]; and when making lime holes, roads, and digging cane holes, a small portion of rum and sugar [barbados rum] And Theoretical recorded in his diary:

In the morning a pretty strong, gentle and coolish pleasant day at times cloudy with some drizzling rain. Several sat a round of molasses amongst the Negroes. Also gave each of rum and some sugar to each Negro children as a reward.

(John in Hall 1999: 17)

Rum was considered medicine of a sort-of in plantation medicine. It was a central ingredient in the treatment of malaria, fever, diarrhoea (dysentery), dropsy, gonorrhea, peripartum (puerperal) fever, helminths, and other disorders (Collins 1811, Menden 1788: 44). Some physicians used a "sweating mixture" of rum and tea only as an antiseptic to close wounds and sores (Bourgeois 1788: 497; DeLima 1974: 325; DeLima 1779: 282). In 1770, surgeons at Turner's Hall wrote, Barbados, used 640 gallons of rum to "treat sick slaves" (TNP).

In Jamaica, Long was a champion of Robert Brown's (1778) comparative research on the effectiveness of rum and wine in tropical parts of Brown's entry into his history of Jamaica. Long observed medicine rum drinking and believed, because of Brown's research that will make good rum when used in this medicine, and not too frequently (was an) antiseptic and antiparasitic. "The widely accepted view that rum had valuable qualities may have led British officials to encourage rum-drinking with the British army and navy. The preventive use of rum even extended beyond death. For

example, Michel Gaudin, a Martiniquais sugar planter who wanted to be buried in France, had his body shipped home in Bordeaux via barrel of rum after his death in 1826 (Michel de Lempdes 1997:37). In 1822, Sir Ralph Woodford, the governor of Trinidad, died on a voyage from Jamaica to England and, according to a letter from the ship's captain Robert Earl,

From the high and active character of the deceased, and his well earned popularity in Trinidad and in the enjoyment his faithful servants, I enclosed his respected remains in a cask of spirits in the hope of being able to forward it to the island where he was so loved, and so that Church's friends might see immediate sign, but the intense heat of the climate has prevented my being having this satisfactory pleasure of showing my respect for the remains of Trinidad, but accept the Official Report of my Surgeon that five of my crew were all from the different parts of the corpse, and I this day religiously committed it to the deep.  
(quoted in Fraser 1994:203, 204)

Legend has it that, after being killed at Trafalgar, Admiral Horatio Nelson's body was shipped back to England in a cask of rum, his customary stimulant of the Barbados, the sailors ate and he kept drunk from the cask, in show respect for their fallen leader. Although already has also been noted in the previous record, belief in this legend is strong, which is why, today, rum is often referred to as "Nelson's Blood" and opening a new bottle of rum celebrated as "tapping the island" (Barnwell 1984).

Many also held the opposite opinion that rum's addictive qualities, in Hispaniola, Las Casas blamed/denied of increased sugar cane price for the high rates of death among African slaves. In 1606, the mayor Tanco, New Spain blamed guinea for death and illness in their province (García 1993 VI: 408-40). Fear about the bad health effects of distilled native Mesoamerican led to the 1608 law that banned all of New Spain (Castroval 1957 64-65). In 1694, the governor of New Andalusia (Newcastle) argued that rum was harmful to the people (Michel de Lempdes 1997:65). In the early eighteenth century, French wine and brandy interests used similar arguments to encourage French officials to impose a ban on the French import of Spanish Caribbean rums. In the 1740s, the same interests argued James Oglethorpe, governor of the Georgia colony, to prohibit a ban on rum imports (Barbrough 1979:14). Colonial officials in North America,

acclaiming particularly negative aspects of rum on the health of Native Americans and attempted to ban the use of rum at the North American fur trade (Marsoll 1985: 91–93). Even Long, a strong advocate of American rum, warned that those who indulged too heavily ‘must be deemed guilty of self-murder’.

In the late eighteenth century, physicians also began to set early campaigns against alcohol-related rum. In 1785, Philadelphia physician Benjamin Rush (1796) published *An Inquiry into the Effects of Spirituous Liquors*, which reviewed the deleterious health consequences associated with the consumption of alcohol, especially distilled spirits. The treatise was a crucial step for early temperance reformers in North America and Europe (Keechough 1979: 20–4). Rush laid out some of the immediate physiological effects of spirit drinking and, then, proceeded to list the effects of long-term exposure to various spirits. Rush challenged the conventional wisdom about alcohol, especially rum, about its prophylactic qualities against various heat, cold, and food intake. Rush was especially critical of rum, reflecting not minimal considering that it was the most available and most spirit in eighteenth century North America. However, Rush’s attack on rum may have also been fueled by his personal abstinence concerns.

Forty years earlier, rum had already come under tough medical scrutiny. In the 1740s, another Philadelphia physician, Dr. Thomas Catherine (1748) identified rum as the source for the common and deleterious ailment known as the ‘West Indian dry gripes’. Interestingly, Lapsley noted the connection between rum-drinking and the ‘West Indian dry gripes’ a century earlier, only shortly after the Barbadians began producing rum.

We are certain dry is thirsty, unless we soothe our bodies with extraordinary liquors, or drinking strong drinks, as of our English spirits, which we carry over, at Private Stores, of the drink of the Island, which is made of the Stomachs of the Coppers, that buy the Sugar, which they will tell them, And though some of them be sensible of they be used with temper, yet the insatiable use of them, soon heats the body, which causes Constipation, and Typhoid in the bowels, which is a disease, very frequent there, and hardly ever cured, and of which many have died.

(Lapsley 1697: 27)

Catherine argued that excessive heat and the consumption of white spirits were to blame and advised patients regardless of gender to stay away from strong punch and rum, especially



newly distilled rum that contain greater amounts of "test fiery particles." What Chubbuck probably did not know of course, was that these "test fiery particles" were lead.

In the seventeenth and eighteenth centuries, rum and the ingredients used to make it came into contact with lead at just about every step of the production process (Hendler et al. 1986; Hendler 1988a). This was true of nearly every distillery in the Caribbean. In the 1780s, Peter Blandin (1788:177), a visitor to Jamaica wrote, "no much lead and copper work is required in and about these [still] houses, that the phlegm and the gang of vapours have employment enough." Much of the rum produced in the eighteenth century Caribbean did in fact contain lead. British army doctor John Hunter (1781) while explaining the possible causes of sickness among British troops stationed in the region, mentioned elevated rates of leadily-distilled Jamaican rum and found it to contain lead. In a pioneering study integrating historical, archaeological, and physical/archaeological evidence, Jerome Hendler et al. (1986), discovered high lead levels in eleven distilleries from Hunter's plantation, Barbados. They attributed the high lead levels in the stored rum consumption of lead-contaminated rum.

Many contemporary writers thought that the West Indian by grapes and other berries disease was particularly common among those who consumed what colonial writers called rum. For example, Manders (1788:43-44) wrote "Nothing is more destructive particularly to our soldiers and seamen, than new rum." In Barbados, sugar planter Griffin Bayley wrote,

Diseases of rum – (who are generally of the poorer sort) suffer from several diseases: those who constantly drinking new hot rum. This is confirmed, by observing how much disease rages among the white servants, as well as negroes, since plantations, which most people are much subject to distillation system, and good spirits (especially strong white new rum, very acid with the juice of lemons, fermented with certain sugar

(Bayley 1750:34-36)

According to Bayley, those who drank a lot of the "son of their hands," a common synonym of lead toxicity (Klevay 1998, 1:3; Department of Health and Human Services 1992)

This little, as a run is, intensive sustained exhalation. In order to avoid poor health consequences, many valiantly recommended the use of aged run, for example, Long (1748:385) argued that one run "should be used [in troops] of less than a twentieth the age." Aging was a corrective to run's cost, therefore, it only made sense to collect run before that aging would correct the excess quality of run. Hunter (1785:3) conducted follow up tests on his run samples and found that "after three or four weeks, lead levels that had one sample had declined." Hunter (1785:6) believed "The deposition of the lead from the spirit by keeping [aging] is most probably owing to the spirit attracting and mixing with the acid that dissolves the lead, and thereby precipitating the metal." Yet, unless lead somehow disappeared from the run over time, aged run made as lead concentrated stills would have been equally as toxic as freshly made run. The lead in the run was lead because of some other lead source and, thus, the volatility of precipitates is greater in water than in alcohol: the lead in run-containing ingredients would be available. Many contemporary writers worried that the quality of new run reflected its lack of age, but, as early lead being a heavy substance is its available state, would have settled at the bottom of the still over time and condensed, therefore, less concentrated when consumed (Woodcock's pers. comm). Hunter may have even recognized this when he wrote "In whatever manner the spirit becomes contaminated with lead, it is a fortunate circumstance, that by keeping it slowly deposits that material."

Last toxicity was probably also the consequence of a particular distilling process. New run appears to have been a type of ammonia produced as poorer pharmaceutical or as small scale run making operations, usually in urban areas, by distillers who could not afford, or who did not want, to invest the wares of physicians such as Hunter and others, or invest in the thousands of lead used in their distilling equipment, especially the most critical water and coil heads. Poor distillers probably also produced less concentrated run, which would have increased its volume of soluble lead. Moreover, the toxic

quality of food: rates may have been magnified by improper fooding methods and the addition of “vicious” ingredients (see below).

European soldiers and sailors experienced higher death rates than did in the Caribbean and excessive drinking often contributed to their demise. For example, Long (1754, II: 30) wrote, “The greater mortality, observable here among the soldiers and transient Europeans, must be ascribed to impurity with them the English custom of eating and drinking in excess, but chiefly the latter.” The unusually high death rate suffered by British troops during the Caribbean campaigns of the 1750s has been usually attributed to yellow fever epidemics. According to David Grogan (1979: 1002-102, 1172), the mortality of Europeans was highest among new arrivals who had no previous exposure to yellow fever and, thus, were vulnerable to the disease. Death tolls among British troops increased as the wet season when *Aedes* vector mosquitoes, the vehicle through which yellow fever was spread, were most active. Death tolls were highest at low lying ports where crowded with sick men. Grogan’s research suggests that yellow fever, or a combination of several diseases, was responsible for the great majority of deaths among British soldiers.

Roger Buckley (1979: 100-104), however, has argued “even British soldiers succumbed to disease caused by almost-elestial and land poisoning than to malignant fever.” Contemporary doctors often blamed the incompetence of the surgeons for the high death rates. According to Buckley, the main cause of mortality was the excessive consumption of land contaminated raw rice. Buckley noted that land sickness could have been diagnosed for the onset of diseases such as dysentery. Their diarrhoea and vomiting, capricious moods, and pain. In addition, yellow fever symptoms often mirrored those associated with alcohol poisoning. Buckley concluded that “many of the deaths ascribed to yellow fever were in fact caused by a disease resulting from miasmatization.”

Grogan also examined contemporary reports about the negative effect of alcohol on British troops, but disagreed with Buckley’s emphasis (and poisoning). Instead, Grogan

suggested that exposure to drinking contaminated in ground and surface waters, which incorporated the already devastating effects of tropical diseases, especially yellow fever. Affected and local poisoning damage the liver and kidneys. The organs most weakens by yellow fever. As with most European and Americans in the eighteenth century, British soldiers and sailors stationed in the Caribbean believed that alcohol had sedative qualities and many felt that highly alcoholized beverages helped prevent the onset of disease. According to Grogan (1982:344) "in the Windward Isles we find rum being treated almost as a prophylactic against that 'infernal malign' give the Disease an Opportunity to attack." Thus, "Heavy drinking can be seen as both cause and effect of the high rate of mortality" (Grogan 1982:344-345).

In 1958, Haxelley (1958:201) modified his earlier explanation on alcohol poisoning and formed, like Grogan, on the connection between the excessive alcohol consumption of British troops and the effects of tropical diseases. Yet, his initial idea was a more direct link between high mortality and the excessive consumption of rum, and the local poisoning and liver diseases greatly increased troop mortality. There is, however, no clear evidence that the consumption of local contaminated rum would have had such an immediate and devastating effect. Lead poisoning is acquired over many years and, for example, Haxelley et al.'s (1980) analysis of three skeletal remains from Montserrat/Plainsford Barbados revealed that lead toxicity was most pronounced in adults three over the age of thirty who had accumulated higher lead levels after years of constant exposure. Infants, even after years of exposure, the analysis showed that only 15% of the sample had lead levels severe enough to be considered potentially deadly. Infants under care by the United States Department of Health and Human Services also show lead poisoning as a degenerative disorder that results from long term exposure (Kinney 1991). Similarly, liver diseases as degenerative diseases acquired from years of constant alcohol abuse. Only those troops stationed in the Caribbean who were constantly exposed to rum—especially local contaminated rum—over many years would have succumbed to these diseases.

Thomas van Bocklry (1798–1877) noted cases of troops dying immediately after new rations and claimed, “There can be no doubt that hundreds of soldiers were killed soon after bringing on their first manioc root.” He pointed out that, in 1799/180 soldiers from the 45th regiment stationed in Grenada died soon after an abundant supply and that, in 1808, 200 members of the Royal Marine garrison stationed at Marie-Galante were hospitalized after bringing on new rice. More alcohol poisoning cases are common even today. In Kenya 140 people died in 2008 after consuming illegally produced petroleum spirits (kerosene) known as *karacha* (rumor and resistance) in the form of a popular drinking method, known as *karacha*. Drinking alcohol at too low a temperature produces deadly methanol rather than ethanol, a practice probably used centuries among less affluent drinkers who sought to maximize yield, which was scarce in the Caribbean. Also, alcohol and small scale drinkers often swallow their own “signature” by adding unique ingredients to a drink to give it a distinctive look. Anthropologist Dwight Heath (2000: 149–150) found that drink drinkers in Costa Rica added jagua, rice, rose, bark, and macadamia to their brews with devastating effects in the restaurant. Such appears to have been the case in Jamaica when, according to Long (1774, II: 30), British troops occasionally died from “their [Jamaican] Indolence in a rich sophisticated compound of new rice, pepper, and other ingredients, blended here by Jamaica residents.” Long (1774, II: 30) wrote, “That this has been, and is still, the most cause of bad health among the troops is evident.” In 1750, Geoffrey Hopton (1798: 34) also noted that red peppers were added to rice in order to “improve the food.” Bocklry implied that the mass death of 26 soldiers in Grenada was the result of bringing on food rations instead of rice. Yet, because food poisoning was long-term degenerative condition, it is more plausible explanation is that these troops brought at least types of manioc root that had been improperly distilled, or which contained a toxic combination of “signature” ingredients.

British Caribbean planters had an economic interest in selling rice to the military and therefore worked to bring their rice to the high security of British troops. James

they argued that “excessive” drinking was the problem. For example, Long (1774B:304–305) believed that the general health of the troops could be greatly enhanced “by removing themselves from the unwholesome use of spirituous liquors.” Long was also particularly critical of the poorer types of alcoholic rum. According to Long (1774B:305) “raw rum,” commonly sold here and widely consumed in the Caribbean “was so fiery, as to be no less fatal to the human constitution, than burning brimstone.” Moreover, rum was particularly valuable, Long believed,

if 500 warriors or soldiers pass from England to the West Indies, nothing will so easily hold together, and securing them after a storm, voyage. Many of them will be mortal with coldness, and with violent and morbid humors, if they indulge, soon after their arrival, in raw rum—distilled

(Long 1774B:314)

Long accused Jews of producing and vending new rum and advocated the sale of only high quality rum to troops. Long wrote

The common soldiers employed in the West India service, must have the warm raw rum, as is frequently been the refuge of the British army. These men cannot be broke of their scotch habit, but since they must not will be in spirituous liquors, some might be taken to provide them with such as, while it gratifies their inclination, may be the least detrimental to their health

(Long 1774B:314)

Watts (1775) made similar arguments. The Jamaican legislature provided tax incentives to troops “that they might be enabled to buy a of the best quality instead of debauching with the balladish liquor sold under the name of rum by the keepers of retail shops” (Long 1774B:304–305). Reduced tax money certainly may have also been the desire to push Jewish traders out of the local rum market as well as encourage the sale of more expensive aged rum to British military agents.

Barkley also cited cases of individuals dying immediately after rum binges. Moreover, rum may have been in short supply here. From time to time individuals intentionally or not, simply drank themselves to death. Alcohol is a nervous system depressant that inhibits the respiratory center in the lower brain. Too much alcohol forces the body's respiratory system to shut down. Modern medical researchers report that hundreds

of Americans die every year of acute alcohol poisoning and the problem seems persistent, among university students, soldiers with the danger of an alcoholic binge (Hudson 1978). What is most alarming about the case of the 26 British soldiers from the 45th regiment drinking themselves to death is that it occurred in Grenada. Grenada and Jamaica would be only two colonies to regularly produce highly concentrated rum. Even then, these colonies often contained 10-15% more alcohol than rum from the other British colonies. Some Grenadians, especially with the highly concentrated nature of rum from Grenada and Jamaica, may have simply overindulged and drunk themselves to death. But about the excessive drinking of concentrated rum was apparently the basis for Admiral Vernon's intention of giving his troops *rum and down*.<sup>10</sup>

One of the central debates in Caribbean slavery is how to explain the high mortality and apparently low fertility of slaves. The negative health consequences of race-conscious slavery have more emphasis in this contentious and still debated issue. Rum, especially when contaminated with lead, contributed to a variety of diseases, accidents, and disorders that must have lowered slave fertility and hastened the deaths of many slaves in the Caribbean.

Colonial writers recognized the connection between rum and health. As the Parliamentary register noted, African slave trade in 1788, Governor Parris of Barbados, noted in Collins, Walver, and Wright (1788-91-92) believed that the many health problems he observed among Barbadian slaves were attributable to "the too free use of rum."<sup>11</sup> Modern scholars have also noted possible links between rum and the health of Caribbean slave populations. For example, historian Frank Wesley Flinn (1956, 1962-63) noted alcoholism as a major cause of slave health problems. Kenneth R. Klein (1986: 152) argued, "excessive alcohol consumption over time may have damaged black liver and pancreas, just as it did among the island whites."<sup>12</sup> Historian Robert Hugel wrote,

Mortality rates (among Caribbean slaves) were actually worse than slave masters charged. These high rates were often caused not by the nature of manure but by the

huddling of well exposed persons, as when masters fed raw cotton-seeds instead of refuse or roasted fish-bone with liberal allowance of rum.

(Folger 1789:153)

Michael Craton (1991:178) also noted that fever, frost, and urinary conditions were often exacerbated by excessive drinking.<sup>4</sup>

In an earlier study of slave experiment records from the last decades before emancipation, historian Barry Hignett (1994) explained the numerous factors that influenced the natural increase of British Caribbean slave populations and caused high mortality. According to Hignett, the arduous work and intense hours of sugar plantation agriculture were a primary cause of high mortality among British Caribbean slaves:

The crucial factor associated with sugar production was the importance of the manufacturing process. . . . The demands of the manufacturing process permitted the maximization of hours of work and physical exertion, while the standardization of techniques permitted the development of gang labor and the direct supervision of the field.

(Hignett 1994:173)

Other crops, such as coffee and cotton, demanded lighter tasks that allowed slaves to recover more leisure time and enjoy sugar rations, especially manufacturing.

The strong connection that Hignett made between population growth and sugar work regimes is especially interesting because slaves in sugar-producing colonies also had greater access to rum. A comparison of British Caribbean rum exports/figures and the natural increase of British Caribbean slave populations shows a possible link between rum consumption and mortality (Table 10-1). Presumably, colonies reporting the greatest quantities of rum also had the greatest quantities available for local consumption. Between the mid-1840s and 1850s, St. Vincent, Dominica, and Grenada reported the largest amount of rum and the most gallons of rum per cent. of sugar. In 1850, these colonies produced 50% of all British Caribbean rum reported in Britain, more than 6 million gallons. They also had lowest rates of slave population growth. The least slaves (as a percentage of colonies reporting more than one gallon of rum per cent. of sugar had negative growth rates and no colony reporting more than two gallons of rum per cent. of sugar had positive increase. In contrast, Barbados and Trinidad were major players in the rum market,



In 1820, Barbados and Trinidad reported a mere 2,811 gallons to Britain. They also had the highest rates of population increase. Most striking is the contrast between Barbados, which exported the least amount of rum per cwt. of sugar and had the highest rate of rum export increase, and Tobago, which exported the highest amount of rum per cwt. of sugar and had the highest rate of decrease. Although Barbados still produced significant amounts of rum for local consumption, there was probably far less available than there had been in the late eighteenth century. Records from Georgetown and Tynes's Hall estates, for example, show that in the early 1820s distillers on these plantations, the two largest on the island, only produced a few thousand gallons of rum each year (GPO, 1977).

Table 16.1. Rum exports to Britain and population growth

Colony	Rum Exports Export Ratio	Net Birth Increase	White & Free Increase	Colony of Rum Per Slave
Barbados 1817-1820	60	+7.8	24,187	144
Trinidad 1818-1821	68	+2.0	22,482	1,008
St. Lucia 1815-1821	11	+4.8	107,826	2,438
Trinidad 1826-1831	15	+3.8	466,368	5,895
Antigua 1817-1820	34	+7.9	1,309,124	10,892
Dominica 1815-1820	40	+7.0	408,710	5,283
Nevis 1817-1821	34	+7.9	471,024	12,695
St. Vincent 1817-1820	52	+6.9	2,821,212	29,216
St. Kitts 1817-1820	96	+2.4	1,918,549	24,487
Montserrat 1817-1820	100	+5.9	571,159	11,248
Barbados 1817-1821	144	+6.4	1,499,287	14,298
Grenada 1817-1820	138	+5.0	5,495,187	32,552
Jamaica 1817-1820	2,18	+2.8	64,515,548	31,400
Georgetown 1817-1820	2,30	+1.1	24,896,594	69,284
Tobago 1819-1821	145	-17.1	5,771,918	27,540

Source: *Register* 1842/188-188; *Register* 1927/18

Trinidad, St. Lucia, and St. Vincent show a trend toward high mortality and low rum exports, but, as Hyman (1964:204-236, 355-407) pointed out, these were colonies, as well as Dominica, Tobago, Grenada, Barbados and Surinam, had other attributes to population increase, especially a large African born slave population and high rates of return. Hyman demonstrated that Creole slaves had lower age-specific death rates and, thus, colonies with larger African born slave populations had negative growth rates. However, other colonies, such as Antigua, Nevis, and St. Kitts, which had more Creole slaves, still

did not achieve positive population growth. These colonies also reported substantial amounts of war.

Alcohol-related criminal morbidity rates and excessive drinking is known to compound existing health problems. Long term exposure is linked to a variety of serious health conditions including liver cirrhosis, heart disease, kidney disease, certain forms of cancer, and a depressed immune system (Lieber 1994, Wolfson 1997). It is possible to attribute many of the symptoms and causes of death detailed in placards on slave overboard-to-drinking. The link between the West India dry gales and war, for example, may reflect more than simply land contamination. Alcohol-related symptoms bear preliminary similarity to liver cirrhosis and include symptoms very similar to the West India dry gales including fever, jaundice, and severe abdominal pain. While land may have been a factor in the West India dry gales, excessive drinking alone may also explain the symptoms.

Excessive drinking also increases the risk of accidental death. For example, in 1902, alcohol was implicated in three fourths of all accidental deaths among Native North Americans (Coffman and Stelmach 1992:34). Alcoholism was one of the leading health consequences of slavery in the North American far north (Maslow 1990). Rummy-drunk and excitement and phantasia overboard from the Caribbean means numerous injuries that may have occurred as a result of drunkenness. In Grenada, in 1805-1810, 7.1% of all slave deaths resulted from accidents, which were the fifth leading cause of death (Higman 1984:340). Between 1795 and 1814, accidents accounted for 4.1% of slave deaths at Worthy Park estate in Jamaica (Coxon 1981:187). Other major causes of death identified by Higman (1984:340) included various infections, which are often consequences of excessive drinking. Excessive drinking often leads to risky sexual behavior and may have increased the transmission of venereal diseases, which shortened the lives of many in the Caribbean (Coxon 1981:187, Higman 1984:340, Wolfson 1997).

As some slave women participated in the heavy drinking culture of the Caribbean, fetal alcohol syndrome may have also elevated infant mortality. Higman (1984: 26–33, 177–207) stated that in the early nineteenth century, less than half of slaves between 20, Lima, Tobago, and Trinidad survived the first year. Infant mortality rates were not much better in the older sugar colonies. In Barbados, there were about 420 infant deaths per 1,000 births. Most of these infant deaths occurred in the first months of life. The high incidence of infant mortality among British Caribbean slave households might be a striking observation of the Abuse and Ignorance hypotheses on runaway children. Fetal alcohol syndrome can lead to stillbirths, physical and mental retardation, and low birth weight that can lower a child's chances of survival past one year (Woolgar 1987). In addition, lead toxicity may have contributed to high infant mortality. A developing brain and infant are those most vulnerable to lead poisoning, and colic and anemia are major symptoms of lead poisoning in children (Gawley 1994). While the Abuse to Crime ratio is probably the best explanation for high slave mortality rates, the evidence in Table 16–1 contains a strong possibility that runaways also factor.

Slave fertility also shaped population growth. Censuses, poor sanitation, disease, household organizations, and the inability to locate partners all influenced fertility rates. A comparison of run exports to Britain and the rate of natural increase among Caribbean slaves suggest another possible link (Table 16–2). Of the single-producing colonies in the late 1840s, Barbados had the highest slave child women ratio and the lowest level of run exports. In contrast, the five largest run exporters—Grenada, Tobago, Jamaica, Dominica, and St. Vincent—had the lowest child/woman ratios (Higman 1984: 266). Once again, Trinidad, with its low fertility and low level of run exports, did not fit the pattern. Higman demonstrated that Carle slaves had higher age-specific fertility rates than African-born slaves, relative to the most likely explanation for higher fertility rates in the older Caribbean colonies. However, the interplay between alcohol use and the hard work regimen of sugar plantations probably also had a major influence of slave fertility.

Table 16.2. Race to short fertility

Colony/year	Short child women per cent	Calculus of race per cent of total
Suriname 1817	0.557	0.540
St. Kitts 1817	0.400	0.567
Nevis 1817	0.468	0.556
Grenada 1828	0.431	1.480
St. Vincent 1817	0.402	0.505
Jamaica 1817	0.398	2.168
Tobago 1819	0.375	1.534
Demerara 1817	0.350	2.802

Source: Figgian 1984: 76.

Cultural racism interpreted the connection between alcoholism and low fertility. In 1744 Charles Spencer, a sugar planter from the British Leeward Islands, wrote:

The causes which impede the Natural Increase of Negroes are: the larger proportion of Infants born to most Slaves; the premature and protracted Continuance of the Men; the extraordinary Prostitution of the Women in the youngest part of their Lives; their frequent and Barrenness brought on by Deliberately imported venereal and Venereal Diseases; the unnecessary use of Fire Brandy, which brings on Debility and old Age long before Nature would otherwise give way.

(Spencer 1768 cited in Figgian 1984: 634)

Excessive drinking among slave women increased the likelihood of miscarriage, especially when combined with overwork and a generally poor diet. Miscarriages often leads to delayed conception and the result of miscarriage, both of which inhibit a woman's ability to conceive a child. In 1826, Collins (1826: 325–326) referred to miscarriages as the “obstruction” and believed it was very common among slave women. Obstructions were a frequent complaint and actual cause of death among female slaves at Workby Park (Collins 1991: 184). In time, excessive drinking can result in low sperm count, loss of libido and poor sexual performance. Menstrual conditions, such as amenorrhea, metrorrhagia, uterine and/or back weights, and female/male infertility could have been exacerbated by the direct consumption of both rum and molasses (Dowley 1994).

### Race and Vulnerability

While many in the Caribbean saw drinking as a means of physical and spiritual escape and a prophetic sign of imperial defeatism, it was also a source of anxiety. The unpredictability of life on the Caribbean frontier, the coercive labor system, and the institutionalized violence produced an atmosphere of individual vulnerability that was

only heightened by a concrete threat. The result was a rich body of folklore that spread a sense of shared vulnerability.

Caribbean folklore is loaded with images of victims of aqueous non-drinking. Drinking related/personal vigilance motifs spread the desire to detect, capture, and punish. This vulnerable while-drunk theme can be found in the traditions of all Caribbean social groups. For Europeans, the immediate enemy was the non-drinker/temperanceist. Legler (1887: 31) believed that “the people [of Barbados] drink much, undrinks much: for a short time their asleep on the ground, and that is occasioned a very uncomfortable lodging.” Greenstone also exposed individuals to natural dangers. Mounet de laun Milly (1787/68), for example, wrote of drinks falling asleep on the beach and being eaten by land crabs. The threat was very concrete for new arrivals in the Caribbean, especially those unfamiliar with the environmental and customary logic/qualms of risk.

Rain guests was not properly called/did/dread/for thousands have lost their lives by its means. When newcomers get in to the land waters, they expose themselves to torment just for it leads the blind and things on it even which are very few hours and days in days (javes).

(Larkin 1783:14)

Black slaves highlight the alcoholic dangers encountered by women enslaved in the Caribbean.

Baragren told de Capitan  
 alcohol for most did  
 now men fell de water,  
 oh then for most did  
 hard work fall de water  
 no then for most did

(Phillippo 1843: 189)

Vulnerability while-drunk was not limited to the limbo play between alcohol and temperance. In the early years of British and French Caribbean settlement, individual misdeeds made up the bulk of the labor force and kidnapping was one of the primary means of acquiring servants for New World plantations. As early as 1644, British Parliament passed an act to prevent the “spontaneous” entry of English citizens to the American colonies. The term “spontaneous entry” was commonly applied to those who were kidnapped/white-

drunk and taken to the Caribbean as indentured servants. To be "Barbadosed" was a common law or underworld and eighteenth century England idiom for someone around the danger of drinking too much and being stolen from (1779: 251 ff). By Robert Lewis' time, more popular and the closest to his nineteenth-century novel (*Robinson*):

Similar possibilities existed for West and West Central Africans. Of the Gold Coast, slave trader John Barbot (1703:178) wrote, "[slaves] are sometimes stolen away, out of their own countries by soldiers or privately by negroes." The slaves did not include once they reached the Caribbean. French smugglers and pirates lured slaves from Barbados with the promise of freedom only to find themselves confined in the French islands. French smugglers from Martinique were likewise spun away direct from Barbados and sold them into slavery in the French islands (Kenneth Surin 1988 para. 1000).

Caribbean folk heroes often fell victim to alcohol. For example, Malincol, the famous slave fugitive and partner in St. Domingue, was captured while drunk at a slave assembly. According to Myriam de Saint-Méry's account,

One day the negroes of Delancey plantation on L'Anse had arranged for a big dance there. Malincol, who had just escaped for a long time, came to join the dance. One young negro, perhaps jealous of the reputation that the presence of this runaway (Malincol) had procured for him, danced with M. Delancey, a overseer and M. Tereau, who were on the plantation. They distributed tobacco profusely, but the negroes all became drunk, and Malincol, as spite of the [word] caution, lost his good sense.

(Myriam de Saint-Méry 1775:98)

Malincol was arrested that night and later executed. Because planter Matthew Lewis recorded a similar story of a runaway slave named Plato who would only come out of hiding to satisfy his strong desire for rum, Lewis wrote (1804:93-94) that night, "in his madness and ignorance to seize the liquor, of which he had so long been deprived, he opened the bagon, and swallowed draught after draught, till he sunk upon the ground in a state of complete insensibility." In that drunken state he was captured and internecined.

The highly combustible nature of rum meant that it was implicated in a number of deadly accidents. In the earliest recorded death by rum, Legon wrote,

We had to consider Negro by such an accident, who bringing a jar of spirit, from the Mill house to the Drink house on the night not knowing the force of the liquor he carried brought the powder somewhat nearer than he meant, that he might the better see how to put it into the Fireball, which conveyed it into the Boat, that the Spirit being near it by the motion, Fire and and part of all the force of the Gunfire and so could no fire and burnt the poor Negro so dead, who was an excellent servant. As if he had in the instant of firing, clipp his hand on the trigger, all had been saved, but he then knew not that care, but the whole vessel of Spirit, and his life to lose. So that again that accident was a most calamitous was given, that most of these Spies should be brought under Death, some even after a short night, and so Fire or Gunfire was so common to them

[Ligon 163758]

In 1762 a slave revolt in Dominica ended when the rebels "beginning their attack ... in the night, and doing considerable damage in shooting off some men by the light of their candles, a single fire, which being communicated to the buildings of the estate, burnt them down to the ground." Eventually, the rebels went for seeking a shelter against the rebels came heavily from the island's means to control and control (Howard 1794 229 [94]). In 1788, during the labor riots in St. Croix, 14 women were killed when a cane windmill they were using to transport fuel to set sugar cane fields was exploded (Gibson 1993 34).

Fire was not the only danger associated with cane. The process of cane making was also fraught with danger. In 1689 Barbadian planter Edward Ligon (1689 15-22) wrote, "We often slip into a Run Cane's not sudden death, for a roller is a monster." In 1750 Barbadian sugar planter Coffin, Hughes provided a detailed example of the dangers of cane rollers.

In the month of April 1743 Abel Aijon say, the then manager at the estate of the honorable and universal society for Propagating the Gospel in Foreign Parts, ordered one of the rollers, which had returned upon (returned from the mill) was left in to be cleaned; the quality of the roller (which as it was not above seven inches deep) The fire was very who attempted to clean it, was so much as the rollers, that closed the rollers and that was with the rollers into actually ... a while around followed him and he was being out their bodies and a house died (Hughes 1758 124)

Jamaican sugar planter Bryan Edwards also warned about the dangers of cane rollers:

In truth, it should be a constant rule with the managers to consider better that the rollers are qualified, and can do much work strong (one water, such men they are most not merely for accident of the cane, but also because it has frequently happened that the rollers of a final roller has actually killed the first person that has entered it without due precaution.

[Edwards 1817 3 383n]

Barbados as the flourishing colonies established on the mainland and other possessions given that, if not properly regulated, become trapped in the vicious circle of violence and pillaged shores and resources while carefully avoided burning war.

Deviant vulnerability was also a common theme in Carib society. For example, in 1685, the wounded members of the crew of the *Olive Branch* (sunked in St. Lucia, gave the Caribs *Ague Virus* (Spanish beauty) in order to get them drunk so that they could more easily kill them (Hulme and Whitehead 1992:75-76). One of the most explicit examples of deviant vulnerability was the case of Indian Warner's Carib brother of mixed European and Carib descent. Indian Warner was the son of Governor Sir Thomas Warner of St. Kitts and the half brother of Philip Warner of St. Kitts. In 1679, after Carib raids on Antigua left many British workers dead, Philip Warner went to meet with his Carib half brother in Dominica in an attempt to negotiate an end to the Carib-British conflict. According to William Dampier's account,

Come morning day there was a great Meeting, but soon to it was made the English showed for the English Warner (Philip) providing plenty of Liquor, and sending his half brother to be merry with him, under notion of his Entertainment, Ordered his Men to open a Septal pipe to murder him and all his Indians.  
(cited in Hulme and Whitehead 1992:83)

The Governor of Barbados, Sir Jonathan Ashles (cited in Hulme and Whitehead 1992:101) wrote that Philip Warner visited Indian Warner and the Caribs "to a feast, and having made them drunk with rum, committed them all to be murdered, not sparing his brother or little children." William Hardy (cited in Hulme and Whitehead 1992:101), a member of Philip Warner's crew, testified that Philip Warner, "having made them [the Caribs] very drunk with rum, gave a signal, and some of the English fell upon and destroyed them." However, in another version of the story, Indian Warner and the Caribs were already drunk when English Warner arrived. According to that account, an old Indian woman

came up to Capt. Harne and told him of King [Indian Warner] and of how he had made them drinking so it is their custom to make a 3 or 4 days call to be drunk before they go upon their design. Little more was said good to the Capt. Warner to look for advantage of they being drunk and fell upon them in the night.  
(Cited in Hulme 1975 cited in Hulme 1992:2)



Drunkness vulnerability was not always an outside threat to Caribbean society. According to Father Labat,

It is evident that a country is not governed without wine [Cane/alcoholism]. It is quite enough for a man, loaded with drink, to remember that one of these people has killed one of his relations, or done some such injury to him, to make him take vengeance there and then. So he gets up without saying a word, and furiously going behind the doorway, splits his head with a club, or strikes him in the back.

(Labat 1703-04:100)

Analysis of Pictures American Slavery in colonised North America has also shown that violence was more frequently perpetrated against other Indians rather than European colonisers (Mauw 1995: 93-94). In addition, historian Peter Mauw has pointed out that Indians "eventually" "traged development whereby to attack other Indians and avoid the consequences."

Drinking was a widespread fact in the Caribbean and even more often the vehicle through which poisons were administered. According to Labat, a dying slave confessed,

He had allowed one of his daughters to give him, and said that when he intended to kill a man, he would scratch the root of a plant, which grows on the Caribbeens hill but becomes killed by the sap. He would then go home and ask his women to brew a drink with him. Having pointed some of the root into a bowl he would first drink some himself and then hand it to his women. Among race, however, it was he and so the race as he did so. This was sufficient to poison the drink and kill the victim at last (his best knowledge).

(Labat 1703-04)

Drunkness was often an excuse for violent aggression and even violent retaliation were not safe from drunken males. In the late seventeenth century, a gang of drunks was killed Governor Stephen of Nevis (Labat 1703:116). Drunken members of the Jamaican militia fired upon Methodist ministers Reverend G. W. Bridges because they were angry about the Methodist conversion of slaves (Clarke 1871:354).

Women on the Caribbean were also targets of attacks. For example, Father de Trier Grisel in *History and Whoredom* (1902:94) described an attempted rape that happened in 1685 "when a gang of half of negroes came to Good Hope where, getting drunk on rum or they usually do, they met a well dressed Frenchwoman whom they dragged aside, but

her clothes, and tried to violate.' Describes domestic violence toward Caribbean women migrant workers in Joseph Simeon's

Every Western tourist is returned again and over the hills that he can give parties in drink on the nights of silence and this is believed the best remedy for often happens amongst the barbarous people, especially when they are concerned with Spanish-Lapins which they are vainly trying to find of, because their mother from long experience is evidently upon the decline. They seem otherwise, to be a shy, reserved set of people.

(1776 cited in Butler and Whitthead 1992: 104)

In colonial North America, Native American women affected the weapons of men during drinking/binges as women protected themselves (Mascoff 1995: 114). Excessive drinking and the associated brought on by culture change and European colonization weakened traditional disrupted traditional family structures and often led to violent confrontations against Caribbean women. In 1964 with regard to the West Indies (cited in Butler and Whitthead 1992: 105) noted "women have done perhaps more than anything else in deriding the Caribbean man." Although the colonial forces brought them, which did mean to reduce the Caribbean population, excessive men consumption made their impact all the more deadly.

### **Alcohol, Resistance, Violence, and Accountability**

As a social lubricant at weekend events and on retreats to the spiritual world, alcohol helped those traversed the physical beach of slavery. Black diaspora celebrations temporarily subverted their migrant identity and the Caribbean played frontiers: symbolic forms of escape preferable to actual migration, revolt, or other forms of resistance. Parties often encouraged the "line-out" where through the distribution of alcohol. On these occasions, parties overrode racism in drinking and drunkenness. Parties only became concerned when a person's position stood in the existing social order or when it interfered with productivity, the source of the plantation's power.

In 1988, anthropologists Craig MacAndrew and Robert Edgar developed a model for understanding drunken comportment that challenged simplistic biological explanations. Biological models advanced the principle that drinking suppresses the part of the brain (the impregno) that normally inhibits deviant social behavior. MacAndrew and

Elgertson (1980:172-173) identified numerous cross-cultural examples in which drunkenness compromised individual conduct and violated the limits of acceptable social behaviour. For example, although members of a society may get drunk, they are still aware that sexual, murder, and the mistreatment of particular kin are deviant behaviours that transgress social limits. The richness of deviant drunken behaviour underscores the changing nature of a culture's drunkenness-compartment over time supported their functionalist argument that drunkenness-compartment was usually *not* biologically determined.

The argument has implications for understanding drinking patterns in the Caribbean. According to MacKinnon and Elgertson, drunkenness-compartment reserved, temporarily, individual accountability and helped circumvent serious social controls.

the state of drunkenness is a state of socially sanctioned freedom from the otherwise inalterable demands that persons comply with interrelational prescriptions. For a while – for years while the rules are temporarily loose – one of the subjects set aside, and the drunken feel through, if not beyond good and evil, is least partially relieved from the accountability others in relation normally require. In a word, drunkenness is that isolated relief on the shore of “love, war” from many of the otherwise imperative demands of daily life.

(MacKinnon and Elgertson, 1980:172-173)

Thus, while drunkenness-compartment remains within the social boundaries of acceptable behaviour, alcohol can stretch those boundaries and do so without serious repercussions.

Ordinarily, drunkenness-compartment operates on the level of interpersonal relationships and merely defers social justice. For example, in Germany, French missionary Father Raymond Breton (quoted in Whistland and Holm 1992:122) wrote, “The [Catholic] husband never talks with the father, the mother, and the brothers of his wife unless they be sober; drink is children.” What Breton asserted was alcohol’s ability to short-circuit kinship relations (the protected interaction between particular kin). Kinship relations have been a popular focus of anthropologists who usually explore how these relations function to reduce family and the conflict Breton described in particular type of kinship relations among the Carib of Dominica, but also showed how drunkenness compromised such relations.

Drunken comportment occasionally did more than simply reflect the values of social interactions. Drunkenness could greatly reduce (or, in some extreme cases, entirely remove) individual accountability. For example, according to Maxwell (1998:121), in colonial North America, it was common practice within many Indian communities to "nominate [a] person who excoriated even the worst or two-worst the influence of alcohol." Carlini apparently shared this non-rigid philosophy of reduced accountability with other North American communities. Carlini, particularly women, were vulnerable to violence from drunken members of their society and Foster-Lubin (1979:99-100) even believed that it was rare for Carlini drinking festivals to "go by without some trouble being committed." Thus, for Carlini, like other Native American groups in colonial North America, alcohol stretched the limits of decent social behavior and accountability somewhat very far.

However, drunken comportment is more complicated in ancient Mediterranean social climates. In these contexts, drunken comportment is more circumstantial, less evident, and functions primarily as a shield to safety-challenge authority. For example, in his study of the role of the drink in the Oaxaca village, Philip Goveas (1984) argued that the drink is mainly (drunken) used to speak freely against those in possession of power. In the case of Oaxaca, drunkenness provided a shield for less powerful individuals to verbally attack and embarrass public officials. In South Africa, Alan Cockley (1997:86) argued that Maatla had a long history of using the shield of drunkenness to attack the social elite and community leaders. He referred to this practice as "a ritualized dissent." Alcohol historian W. Scott Hume (1990) has shown that, in the nineteenth century, the French working class used the shielded drunkenness to resist police. The shield of drunkenness also allowed less powerful social groups to encourage lawmakers to act by cultural pressure. Under French colonial rule in Senegal, young Wolofs most often used the guise of drunkenness to 'beat' their names and chant their names as British soldiers O'MacArthur and Gillingham (1969:79).

In the highly structured social climate of the Caribbean, the slave surveillance system was tightly controlled. The strict social boundaries and the players' desire to maintain the status quo, increased personal accountability and weakened the likelihood of lone-out performances. As a result, slaves' Caribs and poor whites rarely exhibited deviant aggression toward the planter class. For example, while the abundance of slaves provided numerous opportunities for打架, Caribs targeted their violent aggression at other Caribs, especially Carib women. Caribs realized that violent attacks or physical assaults against whites transgressed social boundaries and would have resulted in dire personal consequences.

Evidence that the shield of deviancy was weaker than the need to defend social boundaries was most pronounced in the type of interactions between slaves and free. Colonial Antebellum metropolitan governments explicitly regulated the behavior of slaves informed rules also prescribed interactions between slaves and free. Because planters were in greatly outnumbered metropolitan regions, colonial nations, and the plantation manager's whip helped maintain their power. Confiscating or punishing a member of white society was likely to result in physical punishment regardless of the slave's lack of sobriety: "Frequent visits to white men – without except after political punishment, or private wrongs" (Dukeless 1788:15). The severity of the punishment was often magnified by the "intoxicating oil-rooms and coverings" of the slave society (Dukeless 1788:15). Cells were often employed in circumstances of torture. In the 1770s, John Bradburn, an English attorney, captured in Barbados, recorded the punishment of a slave who had attempted to rob his plantation owner: "For that crime, the condemned was

to be chained to the flange which stretched all round above to keep on the upper part of a perpendicular right and left beam & bound all over till he should expiate by industry or old age, of the latter of which however he had but little chance.  
(Bradburn 1796:37)

While the shield of deviancy did not protect the slave from punishment for numerous physical confrontations with whites, slaves may have used the guise of deviancy to

exchange the source of the planter's power. In 1819, Lyttelton (1817) wrote that cane fields were "often burnt and destroyed by the slaves; the malice of the malcontents of our runaway negroes."

The high level of slave insubordination was most evident in work situations, the fundamental and least negotiable relationship between slaves and planters. In the early nineteenth century, Collins wrote,

[Slaves] who have been drinking, or drinking, or otherwise engaged in some immoral practice, either on the business of time, or depression, will be found at the highest the next morning. They may be detected by the farmers of the time at which they come down, and the soundness of their rings much greater than independence would admit. It is well to order them to child work, and work without transgressions, unless they frequently repeat.

(Collins 1811: 224)

Although planters may have reacted with harshness, they rarely tolerated frequent drunkenness, especially if it challenged their authority or reduced plantation productivity. In the Carriacou, slavery meant that anything else, shaped patterns of drunken comportment. To the planter, slaves were an instrumentally productive labor and planters wanted sobriety from their slaves. In order to identify particularly hard working and temperate slaves, planters reconstructed stereotypes of African ethnic groups that included references to their drinking behaviors. For example, according to Johnes de Saint-Méry (1790/98: 48) among the good qualities of Senegalese slaves was that they were "very sober." A temperate work force was a more efficient work force and, in 1812, a committee of British West Indian planters recommended a reward system for slaves who adhered to guidelines of sobriety (Shandley and Lange, 1978: 9).

Like runaways, drunkenness were forms of escape that made products of labor. Both forms of escape removed the planter's resources and were thus considered acts of theft. When drunkenness interfered with work, it was rarely tolerated and, like runaways, was severely punished. In 1813, Collins, a slave on Pierre Desrochers's sugar estate in Martinique, was given "30 lashes for being drunk" (Foster and Foster 1986: 32). In 1844, Desrochers' son, Philippe received the same punishment for getting drunk and leaving

drinks (Foster and Foster 1950:135). In Cuba, the punishment for drunkenness could include being chained in a bed (Gervais 1950:76). Collins (1831:324) confirmed the status-relating randomness between alcoholic excesses and sexual overings when he reported that, working at a farm of the slaves, his overseer included them in his list to run away. In 1776, the slave boys from York estate, Jamaica identified John and Thomas as excessive drinkers. Their excessive drinking was noted under the heading "vices/immor." a column reserved for information about slave's distress and/or pain. Like idleness or substituting idleness, drunkenness inhibited their work performance and was, in a sense, the death of productive labor. The fact that they remained heavy drinkers over the years suggests that their drinking had not become noticeable, but the potential danger was conspicuous enough to make it noteworthy as a disability.

But there were times when slave drunkenness was managed. There were rituals of rebellion, formal periods when the plantation class sanctioned the temporary reversal of social roles. The underlying principle of rituals of rebellion is that social inequalities produce tensions within a society that regularly need to be released (Turner 1968:86-87). Rituals of rebellion, such as rebellions and festivals, provide regular opportunities for weaker social groups to temporarily reverse social roles and their relative tensions. The occasional release of tensions, tensions, emotions and circumstances like normal social order. For example, anthropologist Victor Turner (1968:174) argued that the Ago (New Year's) ceremonies of the Gold Coast Ashanti "provide, in effect, a discharge of all the ill feelings that have accumulated in structural relationships during the previous year." The physiological effects of alcohol make the change in status even more convincing.

Rituals of rebellion, such as the Akan Adowa Festival and the Igbo year festival, have a long history in West and West Central Africa and have evolved in a modified form in the slave societies of the Caribbean. Bachelardian celebrations occurred at Easter, Christmas, Christmas, and New Year. Like the role of the Akan Adowa (Song of the Ancestress) at the Akan Adowa Festival, the Caribbean played managed rituals of rebellion and release.

disseminated alcohol at these events. In 1791, Agnew (1791: 203) wrote that the Christmas holiday was rife of "drinking, singing, and making merry." Agnew added: "Thus they are able to do, by having also given them in the time four or five pounds of meat, the same quantity of flour or oats, with some rum and sugar to each negro." Plamondon accurately frequently misread the distribution of rum as drivers for such celebrations:

Alcohol enhanced the temporary change in social status at holidays. It was only during these occasions that alcohol reduced individual accountability and allowed slaves to transgress limits of acceptable behavior. According to an anonymous visitor to Jamaica (c.1791: 22): "The negro man ideas of pleasure [at the Christmas holiday] are rife and robust. They soon chiefly in company are drinking off rum and spending two or three days in merriment and drinking." During a New Year celebration, Long wrote,

The negroes are carrying a wooden vessel at her head, which is followed with numerous rows of drunken women who refresh her frequently with a cup of brandy water which he drinks sparingly down, following her John Catoe<sup>1</sup> kept great entertainers, so that what with the liquor and the excessive merriment there are many who are dangerous drunks, and some examples have happened of their dying. (Long 1794b: 43n)

Matthew Mont Long recorded a similar scene celebrating his arrival at his plantation, which occurred within a week of New Year's day:

The singing began about ten o'clock, continued without a moment's pause all day in the evening, and such noise never did I hear all day. The whole of the floor which was not taken up by the dancers was thought very part of the house except the best rooms occupied by men, women, and children, but except that although they were allowed rum and sugar by whole families, and were most of them merry or comatose, there was not one of them drunk, except indeed one person and that was an old woman, who sang, and danced, and seemed merry about as an opium dealer till she stumbled over, and rolled down the main staircase which shocked the decency of even the least polite part of the company. (Long 1843: 83-84)

It is generally thought that Adam Smith was the originator of the Jonkonas (John Catoe) dances and greatly influenced the nature of the ceremonies in the late eighteenth century (Barnes 1997: 66-67):

Plamondon criticized the release of social pressure during these events of rebellion, but does not detail just why go according to expectations. The rule of slaves could



increased during holiday celebrations when large shipments of rum were dispensed, social consequences were relaxed, plantation work was halted, and large quantities of slaves had greater opportunity to roam and assemble. The Barbados slave revolt of 1816 occurred during Easter and the Jamaican slave revolt of 1831–1832 occurred at Christmas (Crider 1982; Dicks 1987a). Most slaves remained within the boundaries of acceptable behavior and the lack of wide-scale involvement in many of these revolts suggests that, despite the relaxation of rules and the shield of drunkenness during these holidays, plantation control remained in place. However, the numerous holiday revolts suggest that some slaves decided to take advantage of the more relaxed supervision and restricted freedoms in order to make their short-term but once-a-year reversal of the social order. Alcohol became a powerful symbol in this sense.

Marx identified the underlying motivation behind excessive drinking, festivity and the release of aggressive impulses. Similarly, anthropologist David McChesney et al. (1971) cited Schulz (1970:104) who argued that drinking gives the society member individual a secondary feeling of power and "a sense of imaginary importance rooted over many anxiety-producing situations encountered in daily life." The sense of alcohol as a type of liquid courage existed among all social groups in Caribbean slave societies. For example, Folger (Latin roots),

often a brown-headed clerk had taken off as Indian child a leg, when he was talking to the father. A Clerk volunteered to kill the dog. The Clerk armed himself with two well-sharpened bayonets, and after moving his courage-finding a couple of glasses of rum, he decimated the dog.

(Quoted in Folger and Whithead 1992:142.)

Europeans had similar beliefs. According to Jamaican sugar planter Charles Leslie, *drinking part*

helps to the frequent custom of having meetings at numerous soldiers, who often meet with numbers to better death, by giving them strong liquors to have their blood exhilarated before an engagement. Still, by the assistance of such a fortification of animal spirits, they may be able more valiantly and courageously rush into the face of battle, and thus set with extraordinary valour in such dangerous circumstances.

(Leslie 1798: 11.)

During a pioneering venture in the 1830s, the English shipwrecking for Henry Cobb reconstructs Spanish language off the coast of Guadalupe. The Spanish present Cobb a ship and even begins to consider it Cobb's own (163-79), at the moment "And when I had finished this great bottleful of hot water amongst our men, we were lying in two rows down, from whom nothing before us fled from." On doing also enhanced the aggressive tendencies of Caribbean pirates, before being executed in May 1834, John Archer, a member of the pirate crew of the Bartholomew Roberts, confessed:

one weakness that has led me to much misery in all the world, has been my insatiable drunkenness. So strong that I have been killed and hounded was the crime that sin more than killed than death ever has.

(Reconstructed by Chatterjee 1997)

The average pioneering nature of alcohol made it an important weapon in warfare. According to Howard Le Froid (quoted in Helms and Whistland 1993: 149), the Carib "never goes war without first having held a great-drinking party and it is here that they hold council." Thomas Lahel's description of Carib war rituals is quite detailed:

After all the company is assembled and has sung and well drunk music to music and dance, when they are able to have it, the master of the Carib makes the proposal for which he has assembled them. Whichever is may be a serious look to be well examined and approved in the usual manner. If it is a war party that is proposed some old women come into the circle herself and in language the point is made to make them to remember. She gives them a long detailed account of the wrongs and request that they had received from these women and point to the the maintenance of these relations and friends who have been killed and when she does that all the company already confirmed by drink, is beginning to give signs of fury and that they live only for blood and death of their enemies. She moves into the middle of the assembly come about half of those who have been killed in war, as if while they speak immediately like horses, attacking them, cutting them in parts, biting them and hounding them with all the rage of which cowardly weakness and drunken people are capable [and] they go to exterminate their enemies.

(cited in Helms and Whistland 1993: 146)

The ritual war drunk as an important weapon of war. These leaders often evoked African cultural traditions in order to mobilize and strengthen the morale of sailors. Among the traditions and resistance slave rebellions was the powerful symbol of alcohol. Alcohol was a key to spirit food and physical escape and the associated in the use of alcohol in these uprisings and in the resistance manipulation of slave owners. Alcohol was necessary for integrating isolated spirits intervals and rebellious and increasing spiritual guidance. For

example, Jamaican men met after defeating British troops during an uprising in 1795, "retreated to their caves to recruit their forces by the use of rum" (Baker 1965: 193).

Cask drinks were an important feature of slave uprisings: Igbo and Akan-style casks were transferred to the British Caribbean and were a common feature of slave uprisings and conspiracies. As in Africa, these cask drinks symbolized alliances and individual obligations to the community. During the rebellious stages of the 1712 slave conspiracy in Antigua, the participants consumed cask drinks that consisted of rum, fat, flour (the garnish of domesticated slaves) and stick a blood (Cotton 1981: 123; Gaspar 1985: 244). During the famous slave conspiracy of 1760, slaves consumed cask drinks that consisted of rum, gunpowder, grave dirt, and blood (Williams 1972: 161). In 1773 in Barbados, a group of "armed williams" consumed an cask drink that consisted of blood, gunpowder, and rum before their uprising (Nikkyne 1978: 14). In 1795, slaves in Curaçao consumed an cask drink called *ware* (dutch for vengeance) consisting of rum and ground bones, prior to their uprising (Ginsburg 1988: 5). And the consumption of rum and gunpowder cask drinks provided the slave uprising in St. Croix in 1848 (Hall 1995: 223). Even after emancipation the cask drink continued to be an important facet of black resistance. During the protest uprising at Maroon Bay, Jamaica in 1965, captured police officers were forced to consume cask drinks of rum and gunpowder in order to show loyalty to the rebels (Browne 1964: 4).

The consumption of alcohol and other powerful ingredients in these cask drinks highlights the marginalization of the lower common consciousness of shared beliefs of diverse African ethnic groups, especially Igbo and Akan. For example, the recurring and important role of veneration to deity life and the need for ancestral assistance in the uprisings is evident in the use of grave dirt. Historian David Barry Gaspar wrote,

taking the cask with gunpowder signified that the words of the living was connected with that of the dead; that they were raised with their ancestors, by whom they seem to be free in their solemn obligations or more dreadful sanctions.

Gaspar 1985: 244

Compander: the basis for power in Africa and the Caribbean, was probably a means of intensifying the violent purpose of the rite. The use of ground horns in the rite drink in Curaçao probably shows the existence of powerful masculine symbols like the bull. Blood was another powerful fluid associated with warriors and warriors. On the Gold Coast blood was offered to gods and warriors in order to secure victory. In Akan society, for example, blood was usually reserved for abosom (deity) war gods (Adams 1999: 199, 202). Not only was blood used/expected offering to ancestors and war gods, but it was also a powerful symbol of military conquest, which may explain why alcohol and red color/symbolism were combined in slave rite and spirit rite. Ethnographies from the Gold Coast reveal that Akan war gods preferred the red color of war highlighting the war gods particular desire for blood. According to (Desautel, Adams 1999: 204), there was a strong relationship between the rite in warlike on the Gold Coast and the symbolic use of blood and alcohol.

The use of alcohol in rite drink also reflects shared beliefs about the spiritual power of alcohol and the hospitality building role of rite. Alcohol and blood were sacred fluids in both Igbo and Akan societies and the widespread use of these ingredients in rite drink suggests that Akan and Igbo rituals with taking practices were particularly strong in the British Caribbean. Compander (1985: 248) argued that the rite drink consumed during the 17th century slave occupancy "were deeply rooted in Akan religious tradition." However, there is some evidence that the mixture of ingredients in the rite reveals an especially strong Igbo influence. Although rite drink were common in pre-colonial Gold Coast, and blood was a symbol of warfare, the Akan believe originate blood was their rite drink pattern. According to historian Robin Law (1999) Igbo land was one of the few places in West Africa that clearly used blood in their rite drink. In addition, Law argued

Despite the reputation of Igbo slaves in the Americas for drinking (or more generally for expressing their dissatisfaction through openly making their rebellious) behavior quite likely that it was the Igbo form of blood-rite which was retained (and even modified) during slave resistance.

(Law 1999)

In fact, despite Gagner's emphasis on African with traditions, sources indicated a strong Igbo component in the oath drinker prior to the revolt. According to Gagner (1981:246), "It was disclosed at the trials that the Igbo slave-Olowu and some others who took the oath swore they 'would Die first' rather than 'betray the master'."<sup>12</sup>

While the use of blood may have been characteristic of Igbo-oath drinker, the use of alcohol, a ubiquitous substance for making spirits and marking sacred occasions probably represents a blending of Asian, Igbo, and other West and West-Central African traditions. The widespread use of oath drinker in British Caribbean slave revolts reveals that slaves sought to mobilize all potential allies, including non-African spirits, through the powerful symbolism of alcohol.

Drunk taking was also evident in the French Caribbean where Kongo and Aka-Pon ("Aché") traditions seem to have been particularly strong. The Bois Caïman ceremony that preceded the 1791 Saint Domingue slave uprising, which led to the creation of Haiti provides an excellent example. On the night of August 21, 1791, slaves gathered in the forested Bois Caïman for a clandestine meeting (Gagner 1981; Law 1995). At this meeting a black pig was slaughtered and its blood was consumed as part of an oath ritual. Most have argued that the Bois Caïman ceremony represented a Kongo-influenced Poro ceremony because the ceremony and knowledge associated with black pigs. Prior to Thomas de Sautz (1815: 14), Williams (1933: 68) noted, apparently the late eighteenth century and was designated by the consumption of rum and gunpowder. The rum and gunpowder connection-possibly devotion was probably an oath drink, used by both participants to silence. However, Law (1995) has argued that the Bois Caïman ceremony may have been a Dahomean-styled blood pact rather than a Kongo-influenced Poro ceremony because for reasons, the ritual sacrifice of pigs was common in Dahomean-styled blood pacts. According to Gagner (1981: 251), "one may deduce that the ceremony was narrowly identified with one particular ethnic group, but more likely that the ceremony reflected a blending of religious traditions." The directly historical account of the Bois

Cuban economy do not mention the use of alcohol. Nevertheless, anthropologist Paul Haggard (1982), described the use of alcohol in Cuban social gatherings and the use of rum was clearly a distinguishing feature of the Kongo-influenced Afro-Cuban religion (FROST 166, LAW 1989). As alcohol was a commonly used ingredient in both *Ardele* and Kongo-derived *malé*, it is likely that it also was used in the early drink of the San Juan Cane Company.

In 1793, the slave uprising in Saint Domingue erupted. One angry colonist would later complain, "The Africans against whom we fight in our colonies are people – and without rum there would never have been any fighting with these people" (Gaggen 1987: 34). As the slave uprising went on, Toussaint Louverture emerged as the revolutionary leader. Toussaint's leadership stemmed from his abilities to communicate with and manipulate various racial groups within Saint Domingue, including whites, freedmen, *deser des*, *Croix des*, and especially African slaves. According to Gaggen,

Toussaint did not lose touch with his African roots. He is said to have spoken fluently the language of his *Ardele* father, apparently the son of a chief – and to have enjoyed speaking it with other slaves of his father's ethnic group. He seems to have become skilled in the traditional use of plants and herbs. Such slaves who lived at the interface between white and black society mediated know the ways of both worlds.

(Gaggen 1987: 34)

Toussaint was personally abstemious, but appears to have understood the value of rum to the African slave when he stated "Give a negro a glass of rum and he'll do anything for you" (cited in Frost 1985). Although the particular drink may have become lost, undoubtedly the sacralization of rum and its link to ancestral guidance made it an important symbol of resistance during the uprising. In fact, the white opened a distillery during the fighting to supply troops (de Pons-Potau 1959: 62). The French Circle soldiers from Saint Domingue probably also recognized the symbolic value of rum in the *malé*, which is why they destroyed what rum supplies after their battlefield successes and seizures of rebel troops (de Pons-Potau 1959: 62). After seeing the negative consequences of excessive rum drinking on the Haitian peasantry, especially in the South

Jean Jacques Domiatius, Toussaint's successor, attempted to restrict opium-taking in Haiti in 1806. Although opium gave little to the Revolutionary regime, resistance to its usage was destabilizing for the new nation. However, during the reign of Christophe, drinking was once again encouraged (MacGowan 1992:81-89; MacGowan 1999:88-109-140-212).

As in the slave society in the British Caribbean, a similar link existed between alcohol, blood-quenching, and warfare in Haiti. According to Melville Herskovits, the Rameau-voleur war god Ogun ate

red-cocks and red beans mixed with rum, and his color<sup>1</sup> red, as worn by his devotees. To this last story he related the custom of the Caco warriors who fought against the American Marines in 1819-20 to wear red in their distinguishing colors. (Herskovits 1937:114)

Herskovits (1937:217) pointed out that some of the Ogun he preferred to drink (red)

Rumian wine, rather than the white wine. Aggressive spirits in Afro-Brazilian cults are also known to prefer rum for its powerful physiological effect and, possibly, its red color. (Lancodé 1964)

The power attributed to alcohol is also evident in the ritualization of war in various Caribbean drug springs. For example, during Tacky's rebellion in Jamaica in 1760, slave rebels, after killing the white servants in Falmouth, valley plantation, drank the blood of their victims mixed with rum (Coleman 1419:81-70). During a revolt at a plantation in St. Anne's parish, Jamaica, the owner

defeated himself for some time with a broad sword, but being overpowered by numbers and decimated by wounds, he fell so high a nation in their society: they cut off his head, sewed his skull round, and made use of it as a punch bowl. (Long 1774:B-447)

According to reports of the 1791 slave uprising in Antigua, slaves cut off the head of a white nation "and washed it with rum and triumphed over it" (Cotton 1982:114).

Although rum was widely used in slave uprisings, its particular link to violence leading the way is best expressed symbol of peace. According to Lobs (1992:85), alcohol was used to control conflicts between slaves from neighboring plantations. During one conflict "Peace was restored between the slaves by giving them some rum to drink.

together" (Holliman in St. Vincent and the Grenadines 1998: 100). Between Yellow and Black Caribs, according to a report by French missionary M. De Beaumont:

during the two days Father Simon stayed during his trip I always had a considerable number of passages on board to ensure friendship with them and the negroes, which is what they wanted, to make them drunk and to give them some presents, without making them aware of my interest, I was however on my guard.

(quoted in Hall and Whitford 1995: 176)

During the Black-Carib uprising of 1795, the wife of a French woman captured by Caribs during the conflict was spared because "she had frequently given them rum." However, the friendship that her frequent discussions of rum had brought did not carry over to her husband and child who were killed (Hall and Whitford 1995: 222). Peace between a post between British colonial officials and various groups in Jamaica and Guyana frequently included rum drinking and the giving of libations.

In both Guyana (Stewart and Johnson) the welcome tradition of the guests was performed in almost the same way: the gift was rum, according to white as well as to black customs. The gestures of Stewart and Johnson mirrored those of drinking: rum-drinking in this respect, blood from a cut in the spirit-house's eaved roof-water and a little clay and rum was caught in a calabash and drunk by both parties.

(de Castej 1986: 189)

Alcohol was widespread in Caribbean slave societies. It provided a means of spiritual and physical escape from the many new woes encountered in the Caribbean. In addition, many believed rum was a medicinal beverage that provided various health benefits. However, rum was also a source of much anxiety and real rum is an early genre that, especially for noncolonized rum, probably increased rates of slave mortality and decreased rates of fertility. Colonizers lowered moral defenses and made less robust vulnerable to a variety of dangers. Although rum was a symbol of slave rebelliousness, drinking provided an alcoholic escape, a temporary relief from social inequities, which probably hindered organized efforts to end slavery. Nevertheless, alcohol was instrumental in strengthening community bonds and between the living and ancestral worlds during war and peace.



CHAPTER II  
TAMING A VOLATILE SPIRIT: THE BATTLE WITH TEMPERANCE AND  
DRAGGONS IN THE MODERN CARIBBEAN

In the nineteenth century, alcohol continued to provide a means of physical and spiritual escape. Slave emancipation did not alter one of the practices that defined the identity of Caribbean peoples and, in many parts of the region—especially in the smaller and more densely populated islands that had slaves—had few opportunities for economic independence. Colonial assemblies constructed regulatory laws to codify legal constraints that forced many former slaves back to the grueling work of plantation labor. As with the former indentured servants and poorer classes of whites during the slavery period, those ex-slaves who were able to become independent farmers faced a somewhat precarious existence. Some planters also constructed heavy debt-based debtors' regulations. As a result, many, mostly from India and China, alcoholized as a means, which, as with their European and African predecessors, featured the pursuit of alcoholic escape.

However, social change and new attitudes about alcohol challenged traditional Caribbean drinking patterns. Christian missionaries from Europe and North America arrived in the Caribbean in large numbers, converting conceptual ideas and modeling temperate lifestyles. Reformers and temperance groups and diverse sets of alcohol-based violence. Planners, who sought to increase a stable and steady supply of labor after emancipation, offered new based work incentives as they had during slavery. Temperance also created African-oriented traditions that the sacred and spiritual meaning of alcohol. Moreover, folk beliefs about alcohol's health and properties remained deeply ingrained in Caribbean society. On the other hand, temperance fit with the conventional attitudes of Black Creoles, many of whom had enjoyed excessive drinking during the slavery period. Some Asian migrants also embraced social traditions, rather than alcohol, to help cope

with the sounds of their own American lives. In the nineteenth century, religious intervention and the onslaught of racism brought new demands that helped shape Caribbean social consciousness. Caribbean nationalists often defined their forces by manipulating symbols of Caribbean identity – including race.

### A Shaping Force of Transplantation

In the late eighteenth and early nineteenth centuries, Methodists, Baptists, and other new missionaries from Europe and North America began migrating to the Caribbean. They saw slaves as ripe for conversion and, often in the deployment of the phylax chain, spread their versions of the gospel. Unlike Anglican ministers of the Church of England themselves, missionaries actively encouraged slaves and freedmen to embrace the means of Christianity. In the early period, however, they had little success. In 1789, for example, Methodists started a chapel in Bridgetown, Barbados, but the project was abandoned a decade later due to the lack of interest. The Methodists made another attempt to establish themselves in Barbados in 1801, yet by 1812 the Methodist congregation consisted of only 58 people, including 11 whites, 13 freedmen, and 34 slaves.

A resurgence of Christian missionary activity occurred during the emancipation period just prior to slave emancipation, which breathed new life into the missionary movement. By the time of slave emancipation in 1834, Methodists, Baptists, and other Protestant missionaries had established roots. In late 1830s, Methodist missionaries in Antigua had added about 11,000 members to their flock. Antigua also had about 6,000 Methodist congregants (Thorne and Kirkhall 1839:25). Baptists were especially strong in Jamaica and membership jumped dramatically after emancipation. In 1837 there were 16 Baptist missionaries and 31 chapels with a membership of 12,948 (Thorne and Kirkhall 1839:66). By the mid 1840s, Methodists in Barbados had 8 chapels, 4 other preaching places, 2 missionaries, and 14 local preachers. They regularly attracted more than 3,000 people to their chapels and meetingshouses (Schomburgk 1844-46:77).

In North America and Europe, those new Christian denominations, especially Methodism and Baptists, were leading advocates of temperance efforts. The success of some of British-Canadian efforts in 1834 coincided with the height of their temperance activity and those governments sponsored similar efforts of temperance in the former areas. In 1837, Reverend James Thorne and J. Horner Kimball, members of the American Anti Slavery Society and temperance advocates, visited Antigua, Barbados, and Jamaica and recorded the poor conditions that had occurred since their emancipation. Among the improvements they noted was that of temperance. They recorded its deficient status in the islands and found that drinking and related various problems caused by Methodism, Moravian, and Baptist planners. Thorne and Kimball expressed hope at the use of Sunday churchgoing, Saturday rather than Sunday, because market day and it was no longer an occasion of drunken excess. In 1843, Baptist minister James Phillips visited Jamaica and also noted the changes.

It is universally acknowledged that temperance is one now the leading use of the former slaves in Jamaica. Since first emancipation at the close of black slavery, a better education from attending the schools was made a lesson of consequence – and this particularly to the interests of temperance and total abstinence societies. In that view before the abolition of slavery and temperance habits had been obtained by nearly one third of the population.

(Phillips 1843: 204)

In 1844 in Montreal, he and several ministers opened a new society. According to *Jamaican Congregationalist* editor W.J. Graham (1873: 1866), the movement and a temperance effort, "The habits were abolished. The regulations were founded by individuals, and afterwards were added to different congregations of which many became conscientious, and have remained faithful."

In 1854, Antigua learned of the arrival of its first temperance society (Graham and Kimball 1859: 28). Within two years, temperance societies existed in the town of St. John's and in the cities of Wesleyan missionaries. According to Joseph Sharp and Thomas Harvey (1858, Appendix A, p. iv), English Quaker abolitionists, the temperance movement in Antigua were very successful and drunkenness was no longer as "widespread as it used to

this island, as in the Good Templars." Thomas and Knibell also celebrated the rise of temperance societies in Antigua:

A large number of persons who were once great wine and spirit drinkers, have recently relinquished this vice. Some who were once unconverted have been reclaimed, and in some instances an abstinence in respect of the principles of the temperance society has been followed by the pursuit and enjoyment of vital religion. Domestic peace and quietness have experienced considerable benefit, and a very general sense of accomplishment in the great reforms which these drinks have long produced on the human system is manifest.

(Thomas and Knibell 1839:26)

In Trinidad, wealthy white ladies and gentlemen, pursuing the philanthropic premises of the Victorian age, also created temperance societies. In 1870 Trinidad had a branch of the Independent Order of the Good Templars: one of the most powerful temperance societies in the world (Pikey 1987). In 1888, the Good Templars challenged attempts by Tinsdale's colonial Committee to deal with drug issues. Other temperance societies included the Blue Ribbon Society, the Band of Hope, and the League of the Cross (Browne 1979:26-27). Total abstinence societies also operated in Jamaica (Phillips 1880:204).

Many planters and plantation managers withdrew temperance and encouraged their workers to do the same. For example, Thomas and Knibell revealed the impact of intemperance and temperance on James Russell's estate in Antigua:

A great change in the use of rum had been effected on the estate under his management just consequent. Formerly, as was the case with the previous owner, great quantities of rum were allowed to run, and this was regarded as essential to their health and efficiency. But he has lately discovered the danger, and the people had not suffered any inconvenience from it. He gave them in lieu of the rum a sufficient allowance of molasses, with which they appeared to be entirely satisfied. When Mr. B. informed the people of his intention to discontinue the rum, he told them that he should not show the example of total abstinence, by abstaining from such small liquors also, which he accordingly did.

(Thomas and Knibell 1839:12)

Plantation managers at Waller and Rose Hall estates in Jamaica also stopped dispensing weekly rations of rum (Stamps and Harvey 1988, Appendix F) (p.242-43). In addition, many planters suspended the practice of allowing rum on Christmas and, as a result, Christmas celebrations became celebrations characterised by sobriety and prayer rather than "drunken riot" (Thomas and Knibell 1839:13).

However, temperance defied plantation traditions. During the slavery period, planters liberally distributed rum to their slaves as weekly rations and as a work incentive. Despite protests from missionaries, as well as some colonial officials, rum drinking and festivities continued after emancipation as a social lubricant as planters asked for large amounts of rum to lure workers as a substitute for lost complement in wages. For example, weekly lodges from Turner's Hall wrote to Barbados Institute that plantation managers often paid "Negro Workers" in rum (WOP's Historical Williams Lee Matheson [1967] 132, 133) explored the causes of social disorder in Barbados and argued, "In 1848 the planters were largely in the same fix they persisted in supplementing wages by a gift of half a pint of rum." In 1848 the process still prevailed—more than half of the population in Barbados still "had only rum all the rum made in the island consumed in it, but rum was expected" to help fuel this system. In 1849, the use of rum to supplement wages was so necessary to attract plantation workers in St. Vincent that "planters freely admitted" any attempt to interfere by a legislative enactment with this pernicious system" (Matheson 1967 133). Workers in Barbados were also paid in rum (Tordoff, Schaffer 1982 38). In order to improve plantation productivity, institutions social design, missionaries and colonial administrators forced planters in Trinidad and Demerara to discontinue rum-based wage system in 1841 (Matheson 1967 132, 133).

However, planters feared extreme steps of circumventing colonial legislation and the condemnation of temperance-minded missionaries. During the slavery period, some planters distributed food to their slaves as the middle of the month when their rations ran out in order to prevent them from selling their rum for rum or weakened workers (Cullen 1911-45:64, 89). Planters feared, of course, that slaves who sold their rum would not have enough subsistence food to get them through the workweek and that they would be required to provide additional rum to help on underfed and less productive slaves. After emancipation, however, planters paid rations at the end of the week in the hope that their workers would spend extravagantly on rum on the weekend and then be compelled to

workers work collectively. The availability of plantation-owned rooms and run shops highlighted the effectiveness of the system. Company stores and run shops sold great amounts of rum to laborers – which created a huge body of debt peons and ensured stable workforces. Workers were compelled to return the next week or harvest in order to pay off their debts. In 1949, colonial officials in British Guiana complained,

16. 'Marketing is difficult in a country which has no roads and stifles commerce, and it was the drastic lack of opportunities for recreation after a day's work that helped to develop the habit of drinking at the estate run-shop, which is very strong to-day. These shops are to be found on every estate, generally near the pay office, and all our villages without exception were notorious for drinking there. This was the only subject on which the negroes need such remarkable unanimity among them.'

17. 'By personal enquiry we discovered that the shop on one of the estates was open from 4.30 a.m. to 10.30 a.m. and again from 3 p.m. to 7 p.m. It was owned by an East Indian living at Georgetown and managed by an assistant. We learned that over a hundred workers were allowed bottles of spirits on account of their near week's wages. This system, which is not meant to drink away last week's wages before he has them, was condemned by all our informants, and usually agreed with them. We were told by some that complete abolition of the estate run-shop might mean forcing back upon being manufactured and sold, but since there are other run-shops in the villages, generally within half a mile from the estates, where those who want to drink their rum or beer can easily go to do so, we think there is little danger of that. We are concerned to see that these shops are completely ignored by those coming personally to the pay office and that the pay position has more chance of getting back to the hands of the worker.'

18. 'We therefore recommend that all run shops again estates should, by means of existing licensing regulations, be closed forthwith.'  
(C.O. 1949/136)

The use of alcohol to supplement wages and ensure debt-bidden workers was not unique to the Caribbean and has been described in a number of historical and cross-cultural contexts (Bender 1978: 144 in Anglin; Crowley 1974: 34 in Australia; Pope 1987: 23 in Newfoundland; Rumbaut 1979: 141 in the United States). In the Caribbean, the practice was mainly associated with domestic work gangs, where labor was especially needed during the harvest or harvest season. In British Guiana, these domestic work gangs were condemned for their extensive drinking and sexual indiscretions (Johnson 1967: 159).

Small farmers also required their share of rum. In many parts of the Caribbean, planters developed a system of distilling rum known as *mufuga*. Under this system,

sharecroppers worked small parcels of plantation land in exchange for a portion of the produce. In 1840, sharecroppers in Tobago received half of all the sugar as well as a bottle of rum for every barrel of sugar their plot produced. In Grenada, rum was also shared between the plantation owner and worker: the latter received a gallon of rum for every barrel of sugar (Hutchins 1994: 17). The inclusion of rum in the worker-payment system was based on the supposition that the molasses that distilled from the sugar and was sent to the distillery also belonged to the sharecropper (Winstanley 1987: 182).

Christian missionaries offered an alternative to rum-based wages and rum-laden company stores. During the period immediately following British-Caribbean slave emancipation, Phillips and other religious leaders recruited volunteers to help build for ex-slaves and establish "free villages." According to anthropologist Sidney Mintz (1974: 168), free villages in Jamaica and other rum-prone islands had 100,000 people and the moral and economic importance of these settlements cannot be overstated. The free village system provided land, education, and economic opportunities for many former slaves. In 1851, the Protestant churches of land-work free village members adopted principles of temperance in all forms of life, including drink. Mintz's study of Sturge Town, a free village in Jamaica, highlighted the impact of the free village system. According to Mintz (Mintz, 1974: 174), "members of the church founded free villages shared an ideology based on church membership and acceptance of its Christian tenets: particularly abstemiousness, industry, and other doctrinal precepts associated with piety, honesty and hard work."

What was the impact of Methodist, Baptist, and Moravian missionaries on drinking patterns in the Caribbean? Christian missionaries sought to relieve the many hardships that confronted former slaves and offer a constructive substitute to alcoholic escape. In Antigua, the use of temperance societies and voluntary banishment of missionaries fostered a spirit of revitalization. In Jamaica, the missionary influence and free village systems may have been especially successful at reducing levels of alcohol consumption. In the 1870s, Jamaica was one of the world's largest rum producers, yet Jamaicans had one of the lowest rates of per

significant consumption in the Caribbean. In the 1890s, Jamaica consumed only about 660,000 gallons of rum annually for a per capita consumption rate of about one gallon per year (Preston 1962: 12–14; Watts 1967: 429). Per capita rum consumption rates in Trinidad and British Guiana were also computed very low (Table 11.1).

Table 11.1. Estimated level of annual per capita rum consumption in the 1890s in gallons

Country	Consumption	Population	Per capita consumption
Jamaica	660,000	8	82.5
Trinidad	1–100,000	8	12.5
Guadeloupe	700,000	700,000	1.0
Montserrat	700,000	4,000,000	0.17
French Guiana	100,000	8	12.5
Barbados	600,000	8	75.0
Trinidad	221,000	100,000	2.2
Jamaica	660,000	5,000,000	0.13
British Guiana	100,000	4,000,000	0.025

Source: Preston 1962: 14; Preston 1962: 427; Watts 1967: 429.

In contrast, the level of rum consumption in Barbados remained high. Although Barbados was a much smaller rum producer than Jamaica, its annual per capita rate of rum consumption in the 1890s was about 7–8 gallons, three and a half times greater than that of Jamaica (Preston 1962: 12–14; Watts 1967: 429). In large part, the highest per capita rum consumption rate reflects the more limited impact of rum-ramp activity, which was resisted by the sizable population of conscientious whites in Barbados. For example, in 1795, when mobs frequently disrupted Methodist convent and closed the Methodist chapel in Bridgetown (Schomburgk 1848: 564; in 1823, when a Barbados General Methodist conference for holding slave petitions in Demerara. After learning of the union, a riotous mob in Bridgetown destroyed the chapel of Methodist minister William Stenbury and ran him off the island (Stewart 1902: 11; Schomburgk 1848: 56–57; Thomas and Kinloch 1839: 71–72). Local officials refused help quell the riot. During the slavery period, other reform-related religious leaders in Barbados were publicly chastised and occasionally brought to trial (Orr 1961: 127). Although Methodists grew after-emancipation, the Bishop of the Anglican Church in Barbados publicly denounced their teachings and many planters refused to allow Methodists to preach on their estates (Thomas and Kinloch 1839: 72). The negative impact of Methodist teachings on plantation owners to workers and the local



community probably strengthened their resolve. According to Thorne and Karball (1979:72) resistance by Methodist preachers "greatly retarded the religious indoctrination through their means." In 1837 Methodists in the smaller island of Antigua had six times as many converts and regular attendance at Sunday services as Methodists in Barbados (Thorne and Karball 1979:28-74). In addition, Methodists and Baptists, the largest denominations in Jamaica and Antigua, all included in Methodist's foldhold in the Barbados. Moreover, while expensive temperance societies flourished in Antigua and Jamaica, historian Robert Schomburgk did not record the presence of such an organization in his detailed list of Barbadian societies in 1846. The suppression of missionary activity... the lack of an economically viable cottage system... and the absence of temperance societies largely explain Barbados' consistently high per capita rum consumption rate in the 1870s.

However, the high per capita rum consumption rate in Barbados also reflects the larger number of white drinkers, especially poor whites. In the nineteenth century, as in earlier periods, rumorous Barbados constituted the massive drinking of poor whites. Thorne and Karball (1979:57) wrote, "They live promiscuously, are drinkers, lecherous, and poverty stricken... a body of most degraded and miserable human beings." However, the 18400 to 20 poor whites could not have been solely responsible for the high per capita rum consumption rate in Barbados. In order for per capita rum consumption rate of Barbados to equal that of Jamaica, poor whites in Barbados would have had to have consumed an almost deadly level of more than 40 gallons of rum per year, or more than a quart per day. Thus, while poor whites probably drank a disproportionate amount of rum, Barbados's relatively high per capita rum consumption rate also encompassed a large number of impoverished black drinkers. Of course, it is noted that Barbados, which at present is considered the most conservative and law-abiding society within the Caribbean, consumed far more rum than "back bay" Jamaica.

The substitution of rum for wages probably also contributed to the relatively high level of rum drinking in Barbados. After emancipation, the economically and politically

powerful resident Barbadian planter class held onto their lands. In contrast to Jamaica, the small size and dense population of Barbados prevented the emergence of a large peasantry. In 1873 a visitor to Barbados wrote,

Time has altered a no. highly populated [the peasantry] are obliged to work, for though they generally own their own lots, and get a good deal out of the 1200 pounds of land attached to them, still it is not sufficient to keep them without working.

(Chaplin 1873: 27)

Former slaves, therefore, were forced to work for Barbadian planters who unlike their counterparts in other British colonies, maintained the practice of paying former slaves with rans. For example, planters in British Guiana stopped using rans to supplement wages in 1841 and, six months, colonial officials then believed "the young were less obediently spirit-shaking than their elders" (Maddison 1987: 19). In the 1890s, the annual rate of per capita rate consumption in British Guiana was not much half of Barbados and probably reflects the impact of abandonment of the rans based wage system and its smaller poor white population (Ponsness 1968:4). Ponsness (1965: 14) Upper class whites in British Guiana had a reputation for excessive drink, but they drink imported European alcohol beverages. Scott considered British Guiana a place "where a glass of rum is ordered before breakfast every almost an institution" (Bell 1889:176).

Table 11.2. Estimated level of annual per capita rum consumption in the 1950s in gallons.

Country	Per capita consumption
USA	2.0
Haiti	0.1
Trinidad	4.0
Montserrat	5.1
French Guiana	2.6
Barbados	1.2
Tanzania	1.2
Senegal	0.8
British Guiana	1.0

Sources: Karvickian 1946:467-471; Ponsness 1962:427; Watts 1947:466

Levels of rum consumption in both Jamaica and Barbados declined in the early twentieth century (Table 11.2). In the 1950s, instead of annual per capita rate of only 0.1 gallons was considered "very weak" (Karvickian 1946:471-473). The rumed consumption rate in Barbados also declined, but remained three times higher than Jamaica's. The decline

probably reflect the ongoing success of missionary activity and the evangelized effect on consumption in the early twentieth century. Contrastingly, non-consumption in British Oceanic areas increased in the 1950s to about 10 gallons. The increase may reflect the growing sophistication of the water, steam and electricity systems. However, the increasing proportion of the population represented by Asians, who were generally less affected by missionary activity, may have been largely responsible for the increase (Blussé *et al.* 1982: 140–144; C.D. 1948: 136; Kervinen 1946: 478; Newman 1964: 40). Trinidad, which like French Guiana had a large influx of Asian migrants, also experienced a slight increase in per capita non-consumption between the 1850s and 1900s.

Temperance was a central cause of Protestant reformers in the British Caribbean but Catholic priest and missionaries, based in the French and Spanish Caribbean, were much less aggressive in their proselytizing of temperance diets and in temperance crusades. While non-consumption actually plays a major role in decreasing levels of non-consumption, a comparison of per capita non-consumption rates also reveals different attitudes toward drinking in the Protestant and Catholic-oriented Caribbean. In the 1850s, Catholic-oriented regions of the Caribbean had a higher rate of per capita non-consumption than Protestant-oriented regions (Blussé, for example, usually may have consumed about 4 gallons of rum, coffee, and cigars per person, and Martinique and Guadeloupe had a per capita consumption rate of over 4 gallons (see Table 11.1)).

Although we lack estimates for Cuba in the 1850s, non-consumption was probably not especially high. The sustained success in the 1890s had a devastating impact on Cuban sugar production, which reduced the availability of rum. Moreover, Cuba had a high percentage of Spanish colonists, who, unlike their Caribbean counterparts in the British Caribbean, generally had a reputation for temperance (Riley 1774II: 552; Ménessier de Saint-Méry 1783: 82). Slaves in Cuba, however, probably consumed a great amount of rum. As in the British Caribbean, rum-based wages and rum-based company stores increased the level of rum consumption. For example, on the *San Juan* Island (now San

to plantations or joined work gangs called *mitayos*. These young workers received meagre if any remuneration; slaves had no slavery (Scott 1988: 282). In 1883, the company owner of Santa Rosa sugar factory in Talara, Cuba purchased a distillery and other tobacco (Pringault 1996: 202). Workers were paid with company shares, which they spent on rum in the company stores and saloons. In the 1930s, the per capita rum consumption rate in the Dominican Republic was 3.3 gallons per year. Considering the temperate reputation of Spanish Americans, it is unlikely that Cuba reached that level and the relatively high rate of rum consumption in the Dominican Republic may reflect rum consumed by the large number of unskilled migrants from Haiti (see Table 11.1).

Levels of rum consumption in the French Caribbean generally remained higher than in the British Caribbean during the early twentieth century. In the 1930s, the annual rate of per capita rum consumption in Guyana was about 2.4 gallons, Guadeloupe about 4 gallons, and Martinique an incredible 6.3 gallons (see Table 11.2). Liberal-Catholic attitudes toward drink, the growing popularity of rum-drinking Protestants, and the substantial white (Jewish) population, especially in Martinique, probably had a positive impact on per capita rum consumption rates in the French Caribbean.

The abstinence reputation of the Spanish in the Caribbean improved strong in the early twentieth century. In 1915, Alfred Robinson, an American temperance advocate, traveled to Cuba and wrote:

The Cubans are so characteristically temperate people. What is drunk by all classes, and especially by the native ones, is consumed in considerable quantity, but the Cubans rarely drink to excess. . . . There is much both imported and of local manufacture. Gin, brandy, and whiskey, cordons and liqueurs are all used to some but moderate extent, but consumption is quite rare.

(Robinson 1915: 76-77)

In the 1930s, Cubans produced an annual average of almost 9 million gallons of aguardiente and exported only about half a million gallons per year (see Figure 11.1). At this rate, per capita consumption was about 2 gallons higher than that of the French Caribbean, but well below that level of the other Caribbean colonial regions. Trade and



Disputes have continued to us about a time 'in which what home' farmers needed themselves of the opportunity to drink immediately on arrival.  
(Pérez 1999: 183)

Unemployed American sailors, sailors and fishermen, significant Cuba (American) operations during Prohibition, which helped magnify Cuba's image as an alcoholic market (Pérez 1999: 184, 185). Ernest Hemingway and other popular writers celebrated Cuba's abundant freedoms and cool spots to encourage their romantic depictions of the region.

In the 1930s, Haiti had the highest rate of rum consumption in the Caribbean. But, by the 1930s, rum drinking in Haiti had experienced a sharp decline. Although the estimate in Table 11.1 probably does not account for the vast amount of rum, rums, and other products (the 2,000 or so small mills that operated in the rural areas, then appears to have been attached domestic rum consumption (Millings 1931: 129). In the early twentieth century, the United States invaded Haiti and attempted to stabilize the country's politics. Between 1915 and 1934, U.S. troops occupied Haiti and instituted social, political, and economic reforms. The occupation of Haiti overlapped with the height of rumrunner activity in the United States and many U.S. troops and government officials considered rumrunner drinking crucial to Haiti's social stability. In 1929, for example, U.S. officials blamed rum Americanization for supplying liquor to seasonal migrants from rural areas and mining zones in Las Capas, which resulted in the deaths of six Haitian peasants (Millings 1931: 176). In 1934, U.S. officials imposed an excise tax on alcohol. Although the large number of small rural distilleries made it difficult to collect, at least one official considered the tax 'a marked step toward the establishment of modern and productive internal taxes' (Millings 1931: 129). American officials probably also saw the tax as a way to curb rumrunner drinking. An American-owned distillery in Port-au-Prince produced industrial rum rums and compared with a Haitian-owned distillery in Las Capas. The local distillery in Las Capas attempted to compete for American-owned distillery in Port-au-Prince by supplying its customers and convincing peasant farmers to sell their rum at low prices (Millings 1931: 176). In 1936, U.S. officials began transferring

power in local authorities and legislatures began mobilising during the mobilisation in order to quell internal dissent. The American high command chose to limit political activities by saying,

Mobilisation and the support of the American warrents would not have been necessary in the Americas. However, until the maturity of the people (because accustomed to stable governments, and so long as ignorance and poverty of the people furnished a revolutionary field for irresponsible politicians, so long was large, irresponsible mass elements of the population in it), so long as they decided not to be deceived further, leaders brought very political forces in them, more for study to act promptly and decisively and – and the whole was recognised to do these things in preserving public order, extraordinary measures must occasionally be taken.

(Malaguzzi 1951: 179–180)

Among the improvements that accompanied U.S. intervention was the implementation of protective tariffs. The tariff increased U.S. export investment and led to a revival in the Haitian sugar industry. The Haitian American Sugar Company, which had operated in Haiti since before the U.S. intervention, as well as six other American agricultural corporations, greatly benefited from the sugar export investment. Sugar exports rose to around average of 70% of exports in 1914–1920, to 95% in 1929 (Williams 1970: 140). The growing interest in sugar making apparently had a negative impact of rice production and, therefore, helped explain falling rice consumption rates.

The American occupation of Haiti also brought Protestant missionaries and marginalised the role of Catholic Clerics. Among the objectives of some clerics was the eradication of African ceremonial voodoo practices, which was highlighted by the campaign war *suppression* in the early 1940s (Macholia 1997: 141, 181–182). Aided physicians promoted with no voodoo ceremonies and was, as should be expected by reformers. While temperance may not have been an explicit goal of the campaign, religious based social movements generally anti-voodoo temperance ideas. However, political leaders continued to highlight the value of rice in the Haitian economy. In 1937, for example, presidential candidate François (Papa Doc) Duvalier placed Haitian peasants with rifles in order to win their support (Hind 1978). The act was reminiscent of Toussaint Louverture's disarming campaign that Duvalier would follow the lead of anyone with rice.

## New Migrants and Old Ancestors

In order to ensure a steady and stable supply of labor after the abolition of the slave trade and the emancipation of Caribbean slaves, contract workers, mostly from India, China, and the East Indies, were brought to the Caribbean on indentured contracts. Between 1833 and 1917, more than 500,000 contract laborers from the East, as well as free migrants from Africa and the Atlantic islands, worked the Caribbean (Knight 1990: 136–147; Perry, Thorbeck, and Mungai 1989: 174–175; Watt 1987: 483). About 325,000 Chinese immigrants arrived in Cuba and 14,000 moved to the mainland colony of French Guiana (Pernoux 1964: 25–26; Scott 1985: 29; Turner 1996: 135–136). The majority of new migrants, however, came from India. Between 1845 and 1917, more than 250,000 East Indians entered British Guiana and, by 1911, they represented nearly half of the population (Pinner 1975: 8; Pernoux 1964: 26–41). Trinidad received about 140,000 East Indians and by 1901 they represented 50% of the population. In the nineteenth and early twentieth centuries, Guadeloupe, Martinique, and Guyana received about 75,000 East Indian migrants (Pachon 1982: 427; Rowland 1986: 106). Although many Asian laborers returned to their homelands after completing their contracts, most stayed and their descendants now represent a large percentage of the modern Caribbean population. Today, East Indians make up half of the population of Guyana (the former British Guiana) and about 30% of Trinidad's population (Stewart 1994: 43; Watkins 1993: 62).

Asian migrants brought with them new cuisines and techniques that steadily added a fresh dimension to cooking in the Caribbean. East Indians, for example, came from societies with strong traditions of spiced rice that went back to ancient times (see chapter 1). In the mid-eighteenth century, French, Dutch, British, and Portuguese colonials established communities in India, where they made sugar cane-based sweets popularly known as *arrack*. By the nineteenth century, cane making was a well-developed industry in many parts of colonial India, China, and Indonesia (Chapman de Courcy 1793; Pinner 1975).



1770, Wey (1846). Because indentured migrants departed from colonial centers in Asia, many were probably already familiar with rum before they arrived in the Caribbean.

Despite the stigma of alcoholic beverages in India, the strict Hindu philosophy of *Chaste* placed tight restrictions on alcohol use. Perceptions against drink were most strongly reinforced by higher castes, especially the spiritually-minded Brahmins. Brahmins saw alcoholic intoxication as harmful to independence (Carnegie, 1979:208). In the twentieth century, Mahatma Gandhi voiced the traditional Brahmin view of alcoholism.

*Drinks and drugs degrade those who are addicted to them and those who traffic in them. The drinker forgets the distinction between right, middle, and wrong, and intelligent states of which in his sober moments he will be most ashamed.*  
(Ghandi cited in Denechere, 1983: 83)

After independence, Indian Prime Minister Jawaharlal Nehru advocated Brahmin asceticism and proposed legislation that prohibited alcohol use in India. Prohibition was successfully introduced in 1977 under the leadership of Indira Gana. But, after popular protest, it was lifted during the government of Indira-Gandhi (Denechere, 1983: 63-72).

While Brahmins were models of Hindu spiritual asceticism and opposed the use of alcoholic beverages, drinking was tolerated and often encouraged, in some segments of Indian society. For example, anthropologist G. H. Carmichael (1979) study of Indians in India revealed that alcohol, particularly wine, was particularly encouraged among the Rajput (Kshatriya)/warrior caste (Denechere, 1983:80; Malik, 1971:34). Although drinking conflicted with Brahmin attitudes about alcoholic intoxication, British colonial rule and the large presence of British soldiers helped reinforce and intensify Rajput drinking. British colonial administrators integrated the traditional Rajput into British colonial systems and often were keen, introduced the British military purchase for maximum drinking. Drinking became a symbol of Rajput status and masculinity. Besides the Rajputs, the Sikhs, members of the low "untouchable" castes, were also not averse to the consumption of alcoholic beverages (Carmichael, 1979:208; Denechere, 1983:21). In India, drinking was especially widespread among low castes at weddings and the spring *Pongal* festival.

Moreover, libations and drink offerings were frequently made to village deities (Duménil 1943: 58-60) (Savory and Dole 1968: 365 cited in Vancouver 1982:51).

East Indian migrants entered a Caribbean social environment that had relatively liberal attitudes toward drinking and where rum was cheap and readily available. Moreover, East Indians worked in the sugar sector of the economy and, therefore, frequently encountered rum and drinking activities. In the nineteenth century, Trinidad and British Guyana, the main destinations for East Indian migrants, were major rum producing colonies. In fact, by the end of the nineteenth-century, British Guyana was among the world's largest rum producers (Parnell 1982: 13-14).

Poor living conditions, inadequate food and water supplies, no sheltered rest areas, a lack of safe medical care, hard labor, homosexuality, and many other stresses provided a favorable environment for social unrest. Between 1877 and 1896, East Indians in Trinidad committed 129 murders (Lai 1982: 144). East Indian uprisings also triggered numerous plantation strikes, riots, and work stoppages. In British Guyana, in 1866, plantation strikes and labor riots became so violent that police and military detachments were brought in to quell the unrest. In Trinidad, one of the most spectacular riots occurred during the Makarsam or Akaram religious celebration, originally a Shiva/Mahesh/Taijesh festival that eventually became a secular popular event (Barnard 1982:195). According to Vancouver Wilson Look Lai:

During the so-called Akaram riots of 1866 when religious celebration gives to itself an official performance placing participants on public, pronounced celebration that year the clash which ensued between the celebrants and police resulted in 22 dead and hundreds seriously injured.

(Lai 1982: 146)

Unrest occurred even within some of the smaller East Indian migrant communities. For example, in the mid-nineteenth century, social tensions in especially common forms of protest among East Indians in Guadeloupe (Barnard 1984: 140). Unrest from strikes was also widespread (Kavanaugh 1996: 147; Turner 1996:125). Involvement alcohol use provided another avenue of escape from the stresses

As with white perceptions of their drinking during the slavery period, white perceptions of East Indian drinking were also related by fears of social unrest and the desire to maintain a productive labor force. John Amphlett, an English master in British Guiana, expressed the socio-symphonic problem:

Coolies are very fond of rum, and their chief drink, a rum and water and named a very inferior description but the they buy it from cheap shops by Portuguese, so the managers are restricted from giving it to them by law. I was told by the manager of one of the largest estates in the colony that nearly every cooler gets drunk when he receives his money on a Saturday, and remains drunk all Saturday, and how about on the Sunday (the Sunday is the best and part of the rum, when drunk is impossible). I myself met Saturday, when calling to see some sugar distillery from Guyana, found a cooler man lying dead drunk in the middle of the drive to the distillery it being so that I had to turn aside the carriage to avoid him, and he had not moved on with rum in retaining after a long call in the house. The consequence is that on Monday the next day he nearly fell.

(Amphlett 1871: 109)

Although British Guiana and Trinidad welcomed the rum-based migration that in 1845 and transportation system flourished in Trinidad in the 1850s, nineteenth century temperance reforms had both impact on East Indian drinking patterns. Few East Indians embraced the Christian discipline, especially Methodism and Baptists who led the evangelization, alcohol use in the Caribbean (Mink 1971: 21–28). Moreover, many disliked the commitment of those East Indians who did convert (Bick 1889: 128). In the 1950s the *Jamaican Chinese Association of Trinitians* emerged, which had some success in moving orthodox Hindu practices (Mink 1976: 31–34; Varma 1990: 179). However, alcoholism has remained a gender problem in modern East Indian communities that in Afro-Caribbean communities (Forsyth 1979).

Structural changes within the modern East Indian diaspora helped blur the traditional social alcohol. Migration to the Caribbean weakened the traditional East Indian caste system as high caste Brahmins, the contributors of most Hindu values, represented only a small percentage of the Hindu East Indian migrants. For example, in Trinidad Brahmins made up 14% of migrants while artisans, agricultural, and generally “low” castes represented more than 90% of the East Indian migrant population (Varma 1990: 96).

Moreover, British colonial administrators attempted to keep Indians social control over the masses of East Indian migrants and, as a result, the ideology of Hinduism continued dominated in the colonies. East Indian communities in the Caribbean (Singh 1994). The state apparatus seemed to function as it did in India. Instead, a governmental progressive form of Hinduism emerged, which had a more spiritual flavor and which stressed non-state ethics (Ramaswami 1982; D.R. Williams 1992:25,111). The weakness of Hinduism control and the large migration of low-caste groups created a social climate that colonial divided use.

Many of the East Indians who migrated to the Caribbean came from Madras backgrounds. Madras, for example, represented about 14% of East Indian migrants in Trinidad. Although island law continues forbidding it is not clear that East Indian Indians entirely rejected alcohol use in the informal Caribbean drinking circumstances. Anthropologist J. Malgouy (1978) examined Madras culture in religious affairs (Srinivas) against alcohol use in Madras communities in Cape Town, South Africa. According to Malgouy (1978:147), despite the widespread availability of alcohol and frequent contact with heavy drinking social groups, alcohol use within the Madras community was rare. However Malgouy's survey identified drinking in about 17% of the sample. A similar situation probably occurred in the context of the Caribbean whereby Madras perceptions against alcohol were somewhat weakened in the margins of the island world. For example, in British Columbia, Madras ceremonies, such as the *Kudjat* festival, became widespread ceremonial events, which included numerous non-drinking (Srinivas 1982:155).

Hindu social and spiritual were of alcohol transferred to the Caribbean and enhanced the sense of alcoholic freedom. In the plantation villages, Hindus conducted religious ceremonies using male platforms and always transfer to those housing villages in India. Migrants practiced non-Brahmanic Hindu traditions, such as ritual sacrifice, which frequently included the pouring of libations and the offering of alcohol to lower deities and spirits. For example, the pig sacrifice in the goddess *Poornima* event, which was conducted

usually used in the baptism marriage of a son, was generally associated with the low

*Clasme* feast. During the *Parroquia* or *sanctor*

offerings are set on a table past *laurea* representing the 'writ' of the violent related problems manifestations. *Almuerzo* (flat offerings) is also performed. After a *moche* such as *moche* (with *moche* [vegetation powder] and *cofite* (the heart of the *yagpa* quickly prepared. Any participant may then *grate* after (a liquid mixture of *cofite* and a variety of other ingredients) on the *del* *cofite* (flour) and offerings of rice and *cofite* are set before it.

(Vernaceo 1993:142-143)

*Sipiripar* was celebrated the *moche*, during which three participants traditionally consumed *rice*, *food* and *cofite* (Bosworth 1982:153). In *laurea*, upper caste *moche* these ceremonies to 'sagpa' also associated with low caste. The strength and persistence of these practices may be attributed to the fact that low caste *moche* represented the great majority of East Indians in the Caribbean.

Among the more common Hindu blood sacrifice ceremonies, alcohol and cigarettes were usually offered to *deity* the history *deity* of *laurea* (Vernaceo 1993:263, 114). Offerings to *deity* *moche* may have been especially important to East Indian *moche* during a new life on new lands in the Caribbean. The offering, called a *moche*, required that six *first* few drops from a newly opened bottle of *moche* be poured on the ground like the *moche* *deity* (Vernaceo 1993:117). The *moche* ensured successful harvest and a healthy household. While some religious ceremonies followed conventional Hindu traditions, others were modified to fit Christian rituals. For example, at Christmas celebrations in Trinidad in 1855 'a great waving garden of red flowers and surrounded by pairs of winged rice and bottles of molasses and rum was dedicated to the sound of drums' (Vernaceo 1993:186).

Some Hindu religious festivals maintained a more secular focus. In Trinidad, the wedding *yagpa* *moche*, which celebrated particular Hindu deities, were often temporary occasions. Usually, about three months prior to the *yagpa* festival, the family giving the *yagpa* began a period of 'spiritual feeding', which included restrictions against alcohol use (Vernaceo 1993:164). The *yagpa* festival, however, had on a smaller scale than the *yagpa*

also represents a period of temperance. There, women strengthened East Indian identity in the Caribbean and celebrated the more sacred identity philosophy.

Chinese migrants also came from societies with strong traditions of alcohol use and added new dimensions to the culture of alcohol in the Caribbean. In the mid-nineteenth century, opium use was widespread among Chinese and Chinese migrants in the Caribbean. It provided sanctuary for a number of Chinese migrants and was a major source of colonial administration (Jensen 1993:207-209). In 1873, a Chinese Consulate in Cuba recorded local assaults on Chinese laborers and their high rate of suicide (Scott 1982:100). According to historian Ross Myers, the absence of sufficient numbers of Chinese migrants provided little opportunity to recreate traditional Chinese family units. The lack of a traditional family structure created personal instability that compromised the ability to survive without Chinese immigrant communities (Scott 1982:271). The difficulty procuring opium in the Caribbean and the ready availability of rum meant that alcohol also generated an alternative means of escape. In 1823, the Intendant, a paid General or Trusted person in Las 1993:92) reported that some Chinese "had shown stronger preferences for rum drinking than might have been predicted from an analysis." In addition, Myers (1995:25) noted sporting events among Chinese laborers in which bottles of alcohol were placed atop ground poles for the first winner who could reach them.

East Indians and Chinese were brought to the Caribbean as agricultural laborers, but many quickly became shopkeepers and entered the local alcohol trade. In 1890, more than 70% of East Indians in Trinidad were agricultural laborers, but prominent among the remainder were proprietors of rum shops (Lau 1993:204). In the 1890s, Indian government representative Mr. D. W. D. Coomra (cited in Lau 1993:214) reported "Some [East Indians] take out spirit licenses, and a few of the shops are of a large size and do a thriving trade."<sup>12</sup> In 1913, 404 East Indians in Trinidad held licenses for rum shops, which reported used more than 10% of all licenses granted in East Indians (Lau 1993:220). Colonial officials in British colonies were especially critical of the aggressive business of East Indians rum retailers who

operated rum shops near port offices or warehouses (C.O. 190-196). Churches were also strong in the local rum trade. In British Guiana, some-Chinese laborers founded the plantations and became involved in illicit rum-making and rum-smuggling operations (Lau 1993: 197). In 1880, Chinese held half of the 784-licensed shop-licenses in Trinidad, as well as 89% of the colony's (Xibeiya) licenses (Lau 1993: 200).

Yet, in Trinidad and the Isle of Guiana, the Portuguese actually dominated the alcohol trade. In the nineteenth century, Portuguese – mostly from the Atlantic island of Madeira – migrated to the British Colonies in large numbers. Most went to British Guiana, where, between 1822 and 1881, more than 30,000 Portuguese migrants. Like first Indians and Chinese the Portuguese began as agricultural laborers but more quickly opened small shops and started selling rum. In British Guiana, Apleford (1873: 70) wrote: “Portuguese, originally immigrants from Madeira, not very flourishing in the colony” they have gradually monopolized the liquor and the shop-keeping trades – and there at leastly a village, however small, is the intention without a Portuguese shop. Whiles in British Guiana may have encouraged the rest of the Portuguese shopkeepers to settle to establish a “stable buffer class” between Madeira and whiles (Lau 1990: 17). Portuguese rum retailers controlled the retail market and even integrated popular culture to improve their trade. For example, in Trinidad in the 1850s, Alphonsus – a Portuguese rum-retailer, sponsored songwriters and local songwriters to write songs that would help advertise his rum. Luiz Menez, a popular songwriter, wrote the lyrics:

Drink your rum and bottle down  
 But don't make him [the bottle] around the town  
 For there is a man I know  
 His name is Mr. Alphonsus  
 He is selling his rum so cheap and sweet  
 It's bound to put you to sleep

(Cited in HBB 1992: 80)

#### **Temperance and African-Oriented Traditions**

*Africans, Europeans.* *African*, as I have shown, Caribbean island societies shared beliefs about the sacramentality of alcohol and the ability to strengthen resistance to the system and social

The consumption of wine in Christian Communion, for example, has many parallels in traditional African religious practices. During the slavery period, slave owners found the use of alcohol to drive plantation families and did not envision it the way that they did other African-oriented religious practices, such as drumming. Moreover, Christian beliefs about alcoholity have enhanced the spiritual use of alcohol and frustrated the widespread use of rum as slave sustenance. Alcohol became a universal substance for slave celebrations with the spiritual world, which was especially evident at birth, marriage, and funeral ceremonies, as well as at an African-oriented religious rituals.

Temperance-minded missionaries faced the challenge of moving former slaves away from African-oriented beliefs that ritualized alcoholity as a key to unlock the spiritual world. However, in the nineteenth century, Christian temperance reformers struggled with their own contradictions. On the one hand, the consumption of sacramental wine frustrated spiritual religiousness, yet alcohol was also a profane substance that belittled the ritual and impeded the progress of Christian conversion. By the late nineteenth century, free-church leaders began to challenge the sanctity of wine. By the early twentieth century... Presbyterians, Methodists, Baptists, and Congregationalists reaffirmed their commitment to temperance by substituting grape juice for wine in Holy Communion (Pear 1990:343). This example, however, did not deny African-oriented religious beliefs and the use of alcohol has remained widespread in the Caribbean's African-oriented religions. Moreover, generalized African-oriented beliefs about the spiritual nature of alcohol indirectly expressed in the fabric of Caribbean culture.

In the twentieth century, when and the more alcohol for a variety of African-oriented practices and a new use of the most pervasive beliefs in the British Caribbean. Christian missionaries reinforced alcohol as a key to an equivalent to conversion. One French Roman Catholic priest in Grenada sought to stamp out alcoholity relating the sacraments to the name village of a number of the village was known as "drinking in



Obadi" (Bell 1889:144, for Hasketh.) Bell, a British colonial administrator in the Caribbean reported:

[O]f late years, with the progress of [Christian religious] missions among the Negroes, they have become a little ashamed of their belief in Obidi, but still cling tenaciously to their magic, superstitions were taught in their previous dread and veneration, and any man with a reputation of "working Obidi" is looked on by all with the greatest awe and treated with the utmost deference.

(Bell 1889:14)

White colonizers doubted the commitment of converts to the tenets of Christianity and Bell (1889:26) for example, believed many were only "nominally Christians. [which] still cling to the old superstitions." From recorded colonial argument of voodoo practices and spells in Grenada (Bell 1889:36)

The use of rum was also strong in Jamaican voodoo ceremonies. In the 1920s, folklorist Martin Beckwith (1929:136-137) explored voodoo in rural Jamaica and described the prominence of rum as voodoo rituals. Obidi happily involved the practice of catching shadows or spirits for personal use and Beckwith recorded the many ways Jamaicans prepared rum to catch shadows and spirits:

To 'put a shadow upon thing' means that the shadow (ghost), or doppelgänger is put upon it to work for you and bring you luck. To remove a doppelgänger you should go to a graveyard at night and visit the grave of some Christian some member of your family, preferably your mother. Take an egg, rice, molasses, and molasses/rice to the grave. The doppelgänger will come up and feed upon the egg and the food which you bring, then you pay him to help you.

(Beckwith 1929:136-137)

In another method:

Get two wide mouthed bottles of glass, two candles, and a bunch of sugar cane and rice stalks, and go out to the graveyard at night. At twelve o'clock you go to the graveyard, put the rice in the bowl, strike your two other bottles with the candle and say "Go and go, come back with a tall you who is in." Repeat this at the first. Then "guard the bowl" and hold up the bottle, guard the first bowl and the bottle, and tell the ghost what you want of it.

(Beckwith 1929:136-137)

As during the slavery period, grave dirt and rum were necessary ingredients for the production of an obidi guard (Beckwith 1929:139; Edwards 1419:212, 142).

Much as in Japanese Shintoist rites to receive help from the spirit world, especially to counter the effects of *akushi*. Developed between *uyui* and *akushi* are striking similarities and the two beliefs are not necessarily opposed (Baron 1997: 95). *Uyui* conjurers, for example, contacted *uyui* spirits with *sen-offerings* and *lekushi* when they needed protection from *akushi* magic. The physical focus of *uyui* was the cottonwood tree around which congregants "the ghost of the dead" (Blackwelder 1929: 145; Baron 1997: 96). *Uyui* was often secured from *uyui* spirits through ceremonies with *uyui* of cottonwood trees and, according to Blackwelder, believers "will go out to cottonwood trees without propitiatory offerings of rice." *Uyui* was gained from a cottonwood tree mainly because "spirit love rice" in addition, because *uyui* were dug out of cottonwood trees, offerings of rice were placed on the water before a tree was felled (Blackwelder 1929: 145-146). During *uyui* dances and events, which usually occurred around cottonwood trees, conjurers received charms and talismans from the spirits of the dead. Blackwelder (1929: 144) noted: "When you dance the *Uyui* of Death loves you and you deal with him. He will give you one [talisman]. . . you must keep it close . . . keep it close in a little thread bag . . . and taking it across you, your feet cross it." Rites appeared angry *uyui* and helped *uyui* followers receive spiritual guidance and protection.

Richard Baron (1997) explored the use of *Afri-Christian* religious in the Black Church and developed a Christianity model that has highlighted the blending of African and Christian beliefs. In America, in the late eighteenth and early nineteenth centuries, *Afri-Christian* belief and *uyui* magic merged with black Baptist beliefs to form a new *Afri-Christianity* (Baron 1997: 97-98-99-102). The most significant change in African derived religious beliefs was the integration of some Christian elements into traditional *uyui* and *akushi* practices. However, the role of *akushi* remained a central feature of *Afri-Christianity*. For example, *Afri-Christian* groups in America, such as *Convent* and *Revival* as a means to recognize the spiritual value of alcohol and members make

offerings of blood and man to appease ancestral spirits (Dubeau 1987 91–120; Chervenson 1998 23–29; Harrison 1989; Sempson 1976: 171). Followers of *Rambla*, a spirit that wrecks ancestral spirits and possessed from African indentured laborers who arrived in Jamaica after emancipation, ritually employ alcohol in their ceremonies. In Trinidad rum is a common ingredient in medicines used by *Shango* practitioners to treat the physically, emotionally, and spiritually ill members (Simpson 1976 81–82). In Montserrat, incense, spirits, launders, *orishas*, frequently receive offerings of rum during *joricos* (dances and percussion ceremonies) (Dubeau 1986: 87).

In contrast to other African-variant religious groups in the British-Caribbean, Rastafarians reject alcohol as detrimental to spiritual life. Isolated groups nonetheless considered the key to spiritual enlightenment. According to one Rastafarian poet,

There is no comparison between gage and rum  
The former keeps you mind the latter makes you dumb  
Because we know it is no agent of death  
Without using of gage you draw new breath.

(cited in Stewart 1988: 152)

The Rastafarians are shocked by the Jamaican government's reluctance to control the use of alcohol despite the dangers associated with drinking. Moreover, some Rastafarian groups, "in place taken on the part of the large families to keep gage from being ingested on street and not on another rum cell" (Dennis 1979 164). However, this is satirical. As the Rastafarian press indicates, alcohol and gage bring about two distinct feelings. "Western researchers have affirmed that, while gage is an appropriate drug for some spiritually inclined groups, members of secular, profit-driven, and mainstream societies often feel uncomfortable with the sensation of being high" (Chervenson 1976).

In the French and Spanish-Caribbean, Catholic priests and movements also criticized African-created religious beliefs, but their spiritualists' alcohol use was reflexively self-compared with that of the Low-Church ascendancy in the British-Caribbean. Catholics embrace the spiritual use of what and, for example, insist not offend Christians by substituting gage juice. Liberal attitudes were codified in Catholicism and

the integration of Catholic beliefs with African-oriented religious traditions that helped elevate the spiritual standing of slaves in the French and Spanish Caribbean.

In the French Caribbean, the spiritual role of rum is most evident in Haitian vodou ceremonies (Bouquignon 1964; Henkelens 1957; Huxton 1938; Métraux 1938; Williams 1922). Alfred Métraux's (1938) extensive study of Haitian vodou described numerous instances in which devotees are obliged to facilitate communication with the spiritual world. In fact, followers contract their particular law (parents or supernatural beings) by making drink offerings. In Martinique, members of the African-oriented religious *généralisme* also employ alcohol in their dealings with the spirit world (Giles 1978). Drink offerings ensure the presence of law in vodou dreams, which then provide spiritual guidance and grant requests. Followers also make rum offerings to law and past ancestors at annual reunions. For example, Métraux (1938:174) recorded a bull sacrifice in which participants poured rum like rain down the throat of a bull prior to its being slaughtered. Some law, usually the most aggressive and successful ones, prefer rum to other alcoholic beverages (Métraux 1938:45–46; TIG; Anthropologist Jack Lawcock (1978) described similar patterns among spirits in African-oriented religious groups in Brazil). In Cuba, Opa, the vodou god of war, has a special prohibition for rum (Henkelens 1957:177). During the U.S. occupation of Haiti, Cato massacre fighters poured rum like rain to seek the help of Opa and the spirits of past military leaders, including Gervais, against the American soldiers (Henkelens 1957:214,214,216,217).

In Cuba, followers of *Santería* also pour rum like rain and make offerings to orisha (spiritual and supernatural beings) in public and private ceremonies. As with Vodou in Jamaica, *santería* originated from Yoruba migrants who arrived in Cuba the nineteenth century. *Santería* devotees maintain a relationship with particular orisha, who guide them through life and protect them from harm. Other orisha also request "accompaniment," including rum, which they inherit from followers during regular ceremonies (*limos*

1991:66). As in Haitian vodou, these like women spend in ceremonies, typically prefer to drink rum (Brewer 1996 [19-Cowdell-Wiggin 1982:156-164, Minkins 1989:108, 116).

Spiritual possession also demands the extensive use of alcoholic Haitian vodou, Cuban santería, and other African-invented religions. Followers of both vodou and santería consume alcohol to attain spirit(s). Minkins describes, for example, how and for "incensed" or "imbibed" by when when they make the proper offerings (Minkins 1989:121). Drinking, as with fasting, sleep deprivation, and other conscious-shrinking activities, enhances the potency of possession. However, spirit possession also has more functional dimensions. As Lascoff (1977) described in Afro-Cuban religious groups, alcohol acts as a social lubricant that facilitates social cohesion and integrates group members. By making offerings and pouring libations, members receive spiritual guidance, which helps reduce anxiety. In addition, the possessed is temporarily empowered. He or she can speak with authority, which, according to Lascoff, may help followers identify solutions to common everyday problems.

The use of alcohol in Haitian vodou and Cuban santería possession has followed migration and culture change. For example, Karen McCarthy Brown (1991) and Jean Dupas (1987) have explained Haitian vodou practices in Brooklyn, New York. While many vodou rites, dances, and temples (dwele) had to be modified in Brooklyn's densely populated urban environment, alcohol has continued to play a vital role in vodou ceremonies (Brown 1991:41, Dupas 1987:18; Minkins 1989:77). Similarly, and for spiritual use of alcohol in santería that, less like vodou and less like formal Cuban state ceremonies around the world (Cowdell-Wiggin 1982:75-94). In fact, in the same way that African deities in the Caribbean were deified to strengthen their symbolic attachment to the homeland in Africa, overseas followers of Haitian vodou and Cuban santería pour libations and make other ritual use of alcohol, which enables them to bridge the gap in their family, friends, and community at home.

Anthropologist Janet Schaffer (1979) examined the *Human Relations Area File* and found that drinking was more prevalent among the French-speaking Caribbean and male poor groups. According to Schaffer, malnutrition and unpredictable crops create conditions that lead people to drink excessively. Excessive drinking provides a momentary feeling of power that allows people to confront their dangerous world. If Schaffer's is correct, then perhaps followers of voodoo, vodou, and similar indigenous groups consume alcohol more often than other groups, such as Christians, which rejected such rituals. This theory might help explain the temperance movement in Haiti/Congo during the slavery period, a group that was probably more skeptical of African-derived beliefs. Schaffer's argument might also help explain the higher per capita rice consumption rates in voodooist Haiti.

Despite the rapid pace of social change in the modern Caribbean, African-heritage beliefs and customs are being shared widely among other contemporary social groups. Members of modern-day tourism societies in Suriname and Guyana continue to perform rituals that rely heavily on the spiritual meanings of alcohol. Anthropologists Richard and Sally Price (1991: 46–61) have recorded the extensive use of rum at the formal wakes of *Guianese maroons* in Guyana. Anthropologist Dean Vickers (1980: 19) also described a concoction made of rum, eggs, peanut butter, red rum, peanuts, rice, a red tuberosus vegetable used in conjunction with live chickens to “wash” away evil spirits among the maroons of Guyana. In Guyana, West Indian maroons routinely pour rum libations and make offerings of rum to their ancestors (Bally 1981: 64–73).

The consumption of rum is also heavily generalized folk tradition that are not necessarily tied to particular religious rites. In rural Guyana, Beckwith wrote,

The commemorative time in an infant's life centers on the month day after birth, when for the first time he is taken out of doors. During the first week after the mother eats only soft food like arrowroot, banana, and milk. On the month day, a bath is prepared for the child, a little rum thrown into it, and much rum of the family man there and his of silver for the strength, or for luck. . . .  
(Beckwith 1959: 52–53)

Rum was also liberally distributed at Japanese Festival events and mourning ceremonies and, according to Beckwith (1929:31,32), gastrointestinal ailments were associated with rum (see also Chaveson 1998:36, Hansen 1929:45). Reverence for ancestors also expressed itself in ritualized meals. In Barbados, rum steeped palms often grace the first cup-full of a newly opened bottle of rum as the ground for ancestors. Anthropologist Peter Wilson also noted the ritualized practice of rum rituals in the western Caribbean island of Trinidad, in Mourner, "the first cupful of a new bottle of rum signified not the intention to inebriate but to make it a sacrifice but an invocation of the positive presence and the potential for healing" (Wilson 1996:47). Reverence in Jamaica also grew historic before drinking rum, as Marie Antoinette practices are accompanied by the saying "petit mort ya" (Chaveson 1998:25). *Groggins petit mort*.

### The Face of Alcoholism

The widespread availability of cheap rum in the Caribbean has made alcoholism a major health and social issue. Definitions of alcoholism are heavily bound by cultural attitudes and thus definitions generally about alcoholism are very societal oriented. Moreover, despite recent breakthroughs in biological research, biological explanations for alcoholism are still highly questionable. When compared to the high rate of alcoholism found among Native North Americans, the relatively low incidence of alcoholism among African Americans in the United States suggests that even if bio-genetics are influential, such models are of little use when explaining incidence of alcoholism among Afro-Caribbean peoples (Smith 2000:176-181), whether alcoholism is culturally or biologically determined is a problem in the Caribbean. In 1940, a Caribbean drug and alcohol abuse survey sponsored by the Pan-American Health Organization identified alcohol as the most frequently abused substance followed by tobacco, marijuana, and cocaine in descending order (Maly and Hansen 1997:106).

Sociologist Debbie Dunn (1988) conducted one of the most comprehensive studies of drinking in the Caribbean. Dunn's study focused on Barbados and included a survey

of 407 residents. Dean (1963: 17) found that drinkers tended to be young men in urban and semi-urban areas who resided in no particular religious denomination. In addition, Dean found that the levels of drinking increased with income. Non-drinkers, on the other hand, tended to be elderly women, married or widowed, who belonged to numerous religious faiths, especially Methodist, Presbyterian, and Seventh-Day Adventist. Non-drinkers resided below the middle class with below average incomes. Dean estimated that Barbadians over the age of 18 consumed an average of about 1.9-gallons of absolute alcohol per year. Here, by far, represented the greater amount of that alcohol. Dean (1963: 116-117) concluded that "heavy drinkers" represented about 6.4% of the adult population in Barbados and that they consumed an average 23 gallons of pure alcohol per year, the equivalent of a pint of rum per day.

In the 1990s, many visitors and missionaries assumed that poor whites in Barbados were responsible for the extremely high level of rum consumption. As noted earlier, these poor whites would have had to consume nearly the exact same amount of rum that Dean attributed for modern Barbadians. In contrast to the consumption of less sophisticated century-old rum and molasses, drinkers in modern Barbados tended to have above average incomes. Unfortunately, Dean's survey did not take into account race, but the study suggests that a small segment of Barbados's population could have significantly shaped the per-capita consumption rate.

Adolescent drinking has been a central focus of alcohol research in the Caribbean. The social atmosphere of adolescence has resulted in different drinking patterns. In the Bahamas, for example, a survey found that only 66% of students under the age of 18 had ever drunk (Malay and Barnett 1997: 206). However, in 1982 a similar study conducted in Trinidad revealed that 66% of students there had ever drunk. (Malay and Barnett 1997: 206). The lower level of drinking among Bahamian adolescents may reflect the reduced availability of locally made rum and the lower number of East Indians who appear to have a greater propensity for alcoholism (see below).



The focus on adolescent drinking highlights the concerns of public health officials yet the effects of adolescent alcohol use in the Caribbean are not always negative. For example, in Jamaica, there are few restrictions on adolescent drinking, and enforcement of adolescent drinking laws are lax. As a result, alcohol use is prevalent among Jamaican school students (Maly and Rensin 1997:288). A 1991 study of Jamaican adolescent drinkers revealed that those who consistently abstained with adult drinking partners had a better self image and were socially well adjusted. In contrast, Jamaican adolescents who drank with peers suffered from lower self image, unconsolidated relationships, and greater anxiety. The study concluded that adult drinking partners have a beneficial effect on the maturity and psychological adjustment<sup>17</sup> of Jamaican adolescents (Smith and Pitts 1994).

Despite perceptions against drink as the first major violation of East Indian as Trinidad (Hinds, Menden, and Pennington), alcoholism has been especially pronounced among East Indian men. While the agricultural work regime may encourage excessive drinking among East Indian men, anthropologist Carolyn Yarrow (1979) has emphasized indigenous social relationships within the East Indian community. According to Yarrow the highest incidence of alcoholism among East Indian men is the result of the East Indian male's desire to escape intense personal conflict with wives, parents, and his laws. These conflicts, which are heightened by rigid Hindu attitudes about proper social and family roles for young men, force East Indian men to seek sanctuary in all male drinking groups. For example, inter-generational conflict between young East Indian men and their fathers stem from opposition Hindu values against men drinking with their parents. According to Yarrow:

The East Indian men drinking are drink with [the father] or with the parent even after marriage. This role is particularly frustrating for those men who are married, raising their own families, successfully employed, and in many cases supporting their parents in some degree, for it means that the son is never fully recognized as an adult male by his parents.

(Yarrow 1979:96)

Abstaining from drink with parents is one of the most prohibitive principles of familial respect in the East Indian diaspora (Vestene 1982:131). Yarrow (1979:95) also indicates

these antagonistic social relationships have led to the rise of a "cultural" form of drinking among First Nations men, which is superficially consensual and involves a positive value to drunkenness.

*Alcohol* use has led to other health and social problems in parts of the Caribbean. For example, an alcohol-related *coronary* rise in the eighteenth-century, nineteenth century problems stem from the consumption of illicitly produced "hard rum" in Trinidad (Gray 1988). In addition, some motor vehicle accidents, domestic, sexual, domestic abuse, and risky sexual behavior are all aggravated by excessive alcohol use (Halsey and Barnett 1997: 203). Excessive drinking has also aggravated existing health problems. In the early 1950s, for example, a devastating epidemic struck Cuba and incapacitated more than 10,000 residents. Symptoms included optic and peripheral neuropathy (vision loss and nerve damage). The epidemic coincided with Cuba's economic decline, which followed the break up of the Soviet Union. Some doctors attributed the epidemic to malnutrition and vitamin B deficiency because the malnourished were most prone to alcohol abuse, as many who often lack significant levels of vitamin-B in their bodies. In 1947, the rate of per capita rum consumption in Cuba was about 1.2 gallons suggesting that alcoholism was not widespread as the primary cause of the epidemic. However, the use of alcohol within the context of malnutrition apparently compounded existing health problems and hastened the spread of the epidemic (Trudeau and Hodge 1993).

In the early twentieth century, British Caribbean gynecologists and physicians like Collins (1881: 169) wrote, "A man drinks at least a foot of rum a day." The belief that alcoholism was a social health problem continues to shape attitudes in the modern British Caribbean. Alcoholics frequently receive treatment at psychiatric hospitals. For example, in 1958, 85% of people admitted to St. Vincent's psychiatric hospital were drug and alcohol abusers (Halsey and Barnett 1997: 203). In Barbados, between 1950 and 1964, 13.12% of admissions to the psychiatric hospital were for the treatment of alcoholism (Stall 1984). These figures only represent explicit admissions – but numerous other cases were seen at

significant decline. In 1982, an alcoholism management group was "initiated" and, by the 1980s, a separate rehabilitation program was organized to deal specifically with substance abuse. Males were consistently more likely to abuse alcohol (Dane 1980) (H. Maly and Burns 1997 2006). In 1993, 83 people were referred to the Barbados (rehabilitation) program and the male to female ratio was about 3:1 (Table 11.3). Despite the high admission rates for alcoholism, interventions for nonpain and cocaine abuse sometimes outpace alcoholics. Tables against women drinking in Barbados have probably helped to limit the frequency of female alcoholism. Dane's (1980-199) survey of alcohol use in Barbados also found that women were much less likely to become heavy drinkers.

Table 11.3. Treatment for alcoholism at the Barbados psychiatric hospital

Year	Admissions	% of Total	Male/Female
1980	114	12	7:1
1981	188	18	5:1
1982	262	27	4:1
1983	320	33	3:1

Source: EMU 1999

Anthropologist Lawrence Ficker explored the shared qualities of drunkenness and "madness" in Barbadian society. According to Ficker:

In Barbadian, the drunken condition has many characteristics in common. The drinker may become "hot" and express his feelings with less restraint, he may curse, rant, rant, rant and do so in the presence of a policeman. He may "get on his feet," he may be aware of what he is doing and otherwise have no control over his behavior. These conditions are frequently expressed: "You drunk or mad?" under-purport a frontal punch and boy who represents an unconventional form of care.

(Ficker 1983:29)

The primary difference between drunkenness and madness is *duration*, *pervasiveness*. The drinker can recover and eventually become a functioning member of society. Penrose (Bastick) (1997) described a similar pattern in an earlier century. Penrose explains whereby French psychiatric doctors defined alcoholism as "pseudo-lunacy." In Barbadian madness and drunkenness often overlap and both are treated as mental health disorders. In fact, the "madness" is typically also a heavy drinker. The connection between drunkenness and madness highlights the particularly negative attitude toward drunkenness in Barbadian society and the strong overlapping cultural concerns with physical and emotional

control. The ability to hold one's liquor is an abstract masculine quality and there is a general inclination for drinkableness. The serious issue of drinking often became. Buchanan and other Caribbean men struggle to highlight this attribute (Jones-Stuart 1976: 58; Miller 1988: 246; Price 1988: 154; Wilson 1973: 166, 168-169; Yarrow 1979:102).

The Senegalese masculine self-control has occasionally led to the adoption of masochistic ideologies in times of moral crisis. For example, in Trinidad, in 1990 black political leader Douglas Douglass demanded that followers abstain from rum-drinking during Trinidad's black power protests (McIntyre 1988: 73). Senator Joseph's probably misquoted U.S. anti-slavery advocate Frederick Douglass is encourage temperance among slaves. According to Douglass (cited in Price 1984: 256) "It was the white drinking slave who was dangerous and needed the vigilance of his master to keep him a slave."

Yarrow's study of drinking in Trinidad explained factors that inhibited alcoholism in Afro-Trinidadians. According to Yarrow, Afro-Trinidadian drinking customs stressed responsibility and self-control (1979:102). Moreover, Yarrow argued that the individual work patterns of Afro-Trinidadians – in contrast to the plantation work regimes of East Indians – resisted regular drinking habits. As a result, Afro-Trinidadian drinking habits were infrequent and generally relegated to weekend social events. To wary also believed that personal attitudes toward drinking in the Afro-Trinidadian hardly legitimated the frequency of alcoholism. However, Yarrow failed to take into account the impact of temperance reforms in nineteenth century Trinidad, which had a greater impact on former slaves than on migrants from East India. In addition, Afro-Trinidadians may have adopted principles of temperance in order to claim moral superiority over contemporary East Indians in the same way that Quakers used temperance to claim that women above the last drinking prior relates.

Psychologist Carol Miller (198) hypothesized personality profiles of "marginal men" in the Caribbean as an effort to understand the factors that influence self-destructive behavior, including alcoholism. According to Miller, marginal men are viewed above as a

means of reclaiming power from those "Others" aimed against them. Miller identified institutional and material forces, including unemployment and crime. In addition, antagonistic relationships with parents, friends, and women often exacerbated feelings of marginality. According to Miller (1991:303), "The destruction of self (through suicide, alcohol abuse, and other risky behavior) becomes a means of dismantling the powerful."

### **The Run Shop**

In 1945, public works officials in British Guiana (C.G., 1949-1966) stated, "We are actively opposed to [run shops] and should like to see them all removed. They are a source of evil from every angle. They are places where you find numerous quarrels and fights. The run shop sells a lot of male drinking smoke-Caribbeens and they have become symbols of Caribbean identity. In Barbados, for example, foreign tourists can take run shop tours. Popular actors, musicians, and writers in the Caribbean and abroad have also romanticized the atmosphere of Caribbean run shop life."

Between 1990 and 2000, during my anthropological excursions at Battle Street in Bridgetown, Barbados, I was introduced to the world of Barbadian run shops. Informants told me that, in the 1950s, Battle Street was the center of popular culture and run shops provided a stage for expression of Barbadian "high life." However, unlike other parts of Bridgetown, and despite its close proximity to tourist shops, the neighborhood around Battle Street did not benefit from Barbados' strong economy in later years. Today, most Barbadians associate Battle Street with drugs, prostitution, and crime.

The neighborhood around Battle Street possessed run shops. Some were little more than open faced stalls, some were partially covered by roof-timber huts. Others were highly polished structures that possessed various amenities. The *Patron Road* run shop, for example, possessed a jukebox and television set. One run shop had a long mirror skyline and a large framed mirror. The *Something For Nothing* run shop housed a kiosk machine. Run shops on Battle Street sold various goods and provided a wide array of services. One shop owned by an 80-year old proprietor sold shoes and

visibility, which he had acquired from local drink sellers who lived in the neighbourhood. Others provided sandwiches, snacks, and a place to watch television cricket matches.

Drinking, however, is the essence of a Caribbean run shop's existence. Varieties of locally made Blended Gey, Cocolique, and F.F.A. Fruit mix, as well as brands beer were the most common alcoholic beverages consumed. Alcohol acted as a social lubricant at run shops, which enhanced social conversation and integrated members of the community. Most run shops possessed a crew, a small group of men who regularly met at the same run shop. Upon their arrival, shop owners or servers would bring a bottle of rum, pitcher of water, and cup of hot tea or coffee, a table. Drinking was often a group activity and alcohol was purchased communally. Less wealthy patrons and crews drank white rum mixed with water. Wealthier patrons and crews occasionally drank dark rum mixed with coke. A few patrons preferred imported brands (e.g. rum and American whiskey). Class distinctions were evident among the run shops on Seale Street and these differences were often expressed by the type and preparation of alcoholic beverages typically consumed.

Caribbean run shops are centers of social interaction and defining spaces of group and individual identity. In 1973, anthropologist Peter Wilson (1973) examined the structural relations between people at the weekend Caribbean island of Providence. Wilson argued, "West Indian socialistically build structure of relations by which men secure their identity men to men, especially from women and which in look congruent with their culture and independent of outside." Wilson identified run shops as mechanisms of male fellowship and places for the construction of male identity. Similarly, Turner argued that the drive-in enhances male peer relationships and male drinking among Afro-Trinidadian men. Burton (1987: 148-149) has also argued that run shops were places where men "valued their own sense of value and identity." In Providence, crews were made up of a small group of men of the same age who shared similar life experiences (Wilson 1973: 16f).

Anthropologist Gary Brass (1974, 1976, 1978) also emphasized the role of Caribbean run shops in men for the construction of male roles. According to Brass (1978:

run shops in Barbados. Schwartz highlighted the public nature of the male-dominated "outside" world which complemented the private female-dominated "inside" world of households. Brown-Sieff considered run shops limited spaces where male conversations acted as a "social shelter" for men who had fallen on hard times largely because of the high unemployment rates in the region. Run shops mediated the difficulties of reconciling work and home (Brown-Sieff 1970:16). This was particularly true for men who played a marginal role in household activities. Brown-Sieff also noted that when run shops functioned as social welfare centers, where unemployed men received small loans and meals. Run shops also helped introduce male social responsibility (Brown-Sieff 1970:16).

Run shops in the Santa Street neighborhood of Bridgetown were also centers of male activity. While run shop owners and associations had discussed recent political events, neighborhood gossip, the economy and women. Although a few women directly participated in run shop activity as partners, most of the women present in the run shops worked as food and drink servers. Women associations usually form run shops occasionally stopped in to sell their wares including locally grown fruits, vegetables, and spices. Urban hawkers sold lottery tickets. Women also participated in the margins of the run shop. Women periodically often joined conversations as men in the run shops from the street, while others watched from doorways. As the ladies in the run shops, men would shop themselves, play cards, or simply "loam." The language of run shop life reflected the masculine metaphor: "Come down for me – for social activities is down here. The saying is so popular in Barbados that it was the title of a popular calypso song in 1959. The song is full highlights the masculine quality of drinking. The masculine connotations of run drinking may also be apparent in the metaphorical connection between men and women, such as when run shop patrons refer to white men as "white money" or a "sweet girl" (Anthony Brown pers. comm.; Collinson 1992:177).

Drinking releases inhibition and gives men the opportunity to release the language and content of the highly restrained and powerful (Leacock 1979:92). As a result, drinking

confine opportunities that encourage feelings of power (McClintock 1973, Johnston 1977). Wilson and Brown show integrated men sleep in places of refuge, where men conduct a non-random sleep study routine. However, the men sleep also provides a stage for men to express power through discourse, speech and silence. Creating voluntary masculinity by allowing men to speak with authority and show dominance in a non-sleep table without reservation. Men sleep provides an important context for the construction of powerful male roles and shared narratives that change as status. Homosocialologist Neil Fox (1981) explored the construction of male roles in men sleep in the St. Vincentian Islander Empire and stressed the distinct emphasis on 'machismo' among older men sleep past groups.

## Conclusion

Since the nineteenth century, Christian missionaries have settled in the Caribbean and sought to reduce levels of alcohol use. The missionary movement, a greater revolution, however, may have simply been to displace the myths of transgressive black Creoles. Jamaica, with its large Baptist following and sophisticated free selling system, appears to have been the most significantly affected by their work. The availability of local alcohol consumption led to the rise of an independent personality that escaped the men based wage and company store system of other regions. Lateral attitudes toward alcohol in the Catholic colonial regions, especially in the French Caribbean, favored higher per capita non-consumption rates, although interdependence is being a new laboratory as works of abstinence. Protestant missionaries began to make an account into traditionally-Catholic areas. Rum also found a new home in the bodies of African migrants, who used it to cope with the many miseries of life in the Caribbean. The role of alcohol as African-enslaved traditions also continued to burn. Despite the onslaught of missionaries, doctors, political events, severe economic cycles, and globalization men remain deeply ingrained in the social fabric of the modern Caribbean and continue to be central of regional identity.



The previous chapters have explored the economic and social history of alcohol in the Caribbean from early years of European exploration and settlement to the present. A survey of historical/archaeological studies in the following chapter suggests that archaeological evidence has increased our understanding of drinking in this region, in the seventeenth century, Barbados emerged as the leading rum producer. The success of building a life on the Caribbean frontier fueled the demand for rum and other types of alcoholic beverages. However, aside from this glorified pattern of alcohol use, a realistic style of drinking also surfaced and Barbadian-colonists refined the art of drinking. Archaeological evidence from a seventeenth-century urban domestic site in Bridgetown, Barbados highlights the construction of drinking performances and provides new insights into the function of alcohol in that colony.

## CHAPTER 10 THE HISTORICAL ARCHAEOLOGY OF ALCOHOL

In the seventeenth century, Barbados emerged as the leading rum-producing colony in the Caribbean. Traveler accounts and historical films Barbados paint a picture of a society steeped in alcohol, where rum and other alcoholic beverages were readily available and drinking was widespread. Archaeological excavations around historic seventeenth-century urban domestic sites in Bridgetown, Barbados provide material evidence of the conspicuous consumption of alcohol among some of Bridgetown's early residents. Here, we review a number of historical archaeological discussions about alcohol events that archaeological evidence can do more than simply confirm the historical record.

Historical archaeological methods are appropriate for the study of alcohol in society and researchers have utilized the production, distribution, and consumption of alcohol in a number of historical and modern settings. However, archaeological investigations into alcohol are typically overwhelmed by problems of taphonomy that limit other emphases. Moreover, few historical archaeologists have rigorously applied historical and anthropological theories to help them explain their alcohol-related discoveries and an overview of historical archaeological approaches to alcohol has never been produced. This chapter identifies central themes in the archaeology of alcohol in the modern world and explains theoretical issues that are most germane to the archaeological study of alcohol and drinking. Understanding the way historians and ethnographers have approached the study of alcohol will broaden the alcoholic dimensions of historical archaeology and provide a foundation from which to better construct an archaeology of alcohol in Barbados.

### Questions for Modern Study

Archaeologists have identified and discussed the origins of alcohol production. For example, Johannes Kraus and Mary Voigt (1986) are among the most recent archaeologists to

attestates the emergence of intensive agriculture in the Near East 10,000–12,000 years ago to the dawn of perfect beer making (Stratford 1913, Katz 1988: 90–91, Katz and Mayling 1991). As current and classical texts in the Mediterranean archaeology have used archaeological evidence, such as grape seeds, stems, and various residue analysis to trace the use of early wine making (Chalder, McGovern, and Hinkel 1990, Rindler 1990). In 2,000-year-old village sites in Northern India and Pakistan, P.E. Allchin (1979) found ceramic pots that may represent the earliest evidence of alcohol distillation. Although the major technological advances alcohol production, fermenting, fermenting, and distilling, developed long before the age of European exploration, the origins of alcohol making in the modern world are of less interesting and a number of archaeological sites have helped shed light on these activities.

In Jamestown, Virginia, John Coats (1958: 801–102) identified and described an early seventeenth-century brick house. According to Coats, unique features including several window brick fireplaces, a post-orn of a copper handle, lead fragments, and residue analysis indicated a wine-infused example, likely associated with brewing. In Québec City, Marcel Minorette also uncovered the remains of a seventeenth-century brewery that was "usually represented by a floor of limestone flagstones bordered by thick masonry walls." According to Minorette (1996) the brewery floor "was associated with masonry for holding water... (and) where today were allowed to sprout before being made into the main product beer making." Minorette speculated the brewery used advanced brewing techniques and was probably too large for a city the size of Québec. Beer making in the area ended in the 1870s and the building was abandoned. It was used as the first location a Police and later a warehouse. However, in the mid-seventeenth century, the building was again used as a brewery and beer making at the site continued until the mid-twentieth century. Another brick house may have also been associated with seventeenth-century use in St. Mary's City. Mayhew (Miller and King 1991: 51), John King (1990: 27) examined seventeenth-century profiles excavated to confirm the presence of small-scale household

herman in the Chesapeake and to argue that the St. Mary's site was probably used for that purpose (see also Gilin and King 1994: 111). Charles Orser (1992) studied the function of a nineteenth-century smithblowing Millwood plantation, South Carolina, which was used to burn a type of tree-ferroplasticated green sulphur.

Ethnohistorical evidence has helped archaeologists identify brewing operations. Cheryl Bell (1994: 47) argued that archaeologists would often overlook alcohol making without the help of ethnohistorical sources. In Bell's case, the recovery of hops from a nineteenth-century farm in Greenwich Township, New Jersey indicated brewing activity. At the site of Barbours plantation, an early nineteenth-century tobacco plantation in Virginia, David Hargrave (see below) found beer wheat seeds among archaeological deposits, which Hargrave interpreted as evidence of brewing. Elizabeth Hargrave and Peter Roberts (1999: 102) recovered ground barley seeds from a mid nineteenth century Gold Rush Store in Sacramento, California, which may have also been utilized for brewing.

Contextual evidence has increased our understanding of beer making at archaeological sites. For example, Lakot Fajaron (1992: 103) listed five large locally made earthenware jars, otherwise known as calabazones, recovered from Africa that date to North America were used for brewing beer. According to Fajaron, a similar jar was traditionally used for that purpose in West and West-Central Africa and, therefore, reflect the survival of African traditions in the Americas.

Archaeologists have addressed gender divisions in alcohol drinking practices. In parts of Europe, Africa, and the Americas, women were often the primary producers of brewed alcoholic beverages. Archaeologists have explored links between women and brewing in a number of historical settings. For example, James Gidd and John King (1994: 113) argued that beer making was a supplemental economic activity in the Chesapeake and they attributed the site of small-scale brewing operations St. Mary's City to women (see also Johnson 1986: 142). According to Janet Foxworth (1993: 134), brewing operations in the Chesapeake began on a female domain, but were often taken over

by men, they began to make substantial contributions to household income. In Canada, Ecuador, Andean women traditionally produced and managed the art of brewing. According to Rose Isenman (2000: 95, 104–105), Andean women continued to be the primary producers of chicha after Spanish colonization, although Andean brewing vessels were replaced by Spanish colonial ones:

Women's taste of Spanish-imported ceramics means that spontaneously Andean drink and dishes sold in public markets must make an occasional visit into foreign (Peruvian)–Spanish ethnic groups. Such activity promotes the less-between public and private spheres and also challenges the assumption of women's forced focus on particular ethnic groups.

(Isenman 2000: 105)

Early colonial brewing in North America was typically a small-scale cottage industry, but experimentation led to changes in beer making that accelerated the shift toward large-scale brewing operations. One of the main factors that led to the rise of beer brewing occurred in the mid sixteenth century when an influx of German immigrants brought knowledge of new and innovative brewing techniques (Friedlaender 1979: 128). At the same time, technological change and the increasing requirements of labor led to the industrialization of brewing practices. In Hageron Ferry, West Virginia, Deborah Hall-Walsh and Frank Walsh (1994) investigated a late nineteenth-early twentieth-century brewery and bottling operation. Hall-Walsh and Walsh used documentary evidence to explain the form of brewery work and they speculated about the harsh working conditions workers must have endured. Hall-Walsh and Walsh provided details about the earliest Hageron Ferry brewery bottles, but could not immediately explain the paucity of the brewery's bottles in the contemporary period of Hageron Ferry residents. However, they argued that there was then a significant external supply bottle to the brewery and thus, the lack of brewery bottles recovered from the town's personal collected bottle recycling program, that Hall-Walsh and Walsh felt compelled to explain why, if Hageron Ferry bottles were the bottle system, any of the brewery's bottles were found in the town's period. They considered a number of possibilities including theft by workers seeking free

beer, salvaged by degraded workers, and leached on the part of local residents (Munro). Hall, White and White argued that the presence of bottles from other regional breweries in the town's garbage probably reflected the greater difficulty involved with returning bottles to distant breweries. In 1980, Mark Walker (1980) excavated a nineteenth century settlement brewery in Alexandria, Virginia, which also possessed bottles from local and regional breweries and showed the widespread practice of bottle recycling.

Archaeologists have also examined the emergence of wine making in the modern world. For example, Prudence Rice and Qing Song (1989) excavated Spanish-colonial wineries (*lagares*) in the Mezquique Valley region of Peru. They and their colleagues identified over 130 winery sites and the research has been used as the basis for a number of wine-related studies (de France 1996, McEwen 1992, Rice 1996, 1997, Rice and Van Derk 1991, Song 1987, Van Duren 1999). Rice and Smith (1989) excavated extensive excavations at a seventeenth century winery in Lima, Peru where they interpreted the specific functions of winery buildings and even tried to estimate production for the Mezquique Valley based on the number of ceramic storage vessels recovered from the site. In South Africa, Jan Wadell, Martin Hall, and Cornelia Klerks (1991) examined archaeological deposits at Vergelegen, an eighteenth and early nineteenth century Dutch farmstead on the Cape coast. Its last part of Vergelegen was devoted to viticulture and the estate probably produced wine for the export market. Excavations at the Vergelegen were either revealed archaeological details consistent with what was known about the technology of South African wine making, and storage from documentary sources. More surprisingly, archaeologists found alcohol production and storage, as with the Mezquique Valley wineries, dominated the surface assemblage from the Vergelegen wine cellar. James Schaeffer and John Hoffmann (1997) also focused on the impact of nineteenth or later use patterns on the original seventeenth century settlement site of Las Vegas, Nevada. In 1820, American missionaries visited the area near Las Vegas creek. But the area was quickly abandoned. In the 1870s, wine production started at the site and, according to

Schoenwetter and Holmstrom, pollen-core samples revealed changing land-use patterns associated with the need to irrigate the vineyards.

Archaeological research has also been used to identify wine-making. At eighteenth- and early nineteenth-century Rancho El Tránsito near Fort Yukon, Alaska, Anne Crowell (2000: 115) recovered differential seeds that may have been used to ferment a cheap alcoholic alternative to agave wine and heavily imported French Brandy. Maria Franklin (1991: 21) argued that preservation and heavy taxes made successful from the east to the of an eighteenth-century slave quarter in Williamsburg, Virginia likely reflected evidence of wine-making. The recovery of shadblow pollen from eighteenth-century gardens in Newport Rhode Island has been interpreted as evidence of shadblow wine-making (Franklin, 1990: 200). Noel Holmgren (1998) recovered hundreds of cherry pits, leaves, and whole cherries from bottles from the Weatherford vineyard site in Williamsburg, Virginia. Cherry filled bottles were also found at Thomas Jefferson's home, Monticello (Kilco-1992). According to Noel Holmgren (1998), cherries from these bottles were probably used to produce a type of liquor.

As with brewing, wine-making possessed a specific cultural culture and a unique division of labor. Frederick Rose and Jan Van Brick (1993) studied the material culture of the Mosquero Valley wineries, concentrating on the design and layout used in the transport of wine. These ceramic storage jars were produced and taken associated with many of the wineries. According to Rose and Van Brick,

Kilns [were] an important part of the technological complex associated with viticulture that was transferred to the Andes by the Spanish colonists. Like the wine technology itself, the kilns retain many elements of their Spanish and Inca roots and reflect Inca-Romano heritage.

(Rose and Van Brick, 1993: 38)

Isabel de Prieto (1996) examined faunal remains from the winery site in order to explore the role of animals in winery operations. According to de Prieto, the faunal remains reflected the heavy use of don't animals in wine-making and transport. In addition, goats were used for the production of goat cheese (cheese).

The Mispangua Valley research also explored the lives of winery workers. For example, Greg Smith (1987) attempted to distinguish Quechua, Aymara, and Spanish cultural influences at the winery site and found that Aymara may have been more heavily involved in making containers needed for the storage and transport of wine. Using ceramic assemblages from domestic sites at the Mispangua wineries, Mary Van Buren argued that indigenous Aymara culture had a strong influence on winery workers. However, although Van Buren showed that indigenous Aymara ceramics were quickly incorporated into Spanish colonial contexts, de Pinares (1996) argued that the relatively low frequency of native Aymara assemblages in the winery's domestic assemblages indicated that indigenous laborers were less likely to produce traditional ceramic foodways. In Spanish St. Augustine, Kathleen Deagan (1972) argued that eventually, the blending of Spanish and Indian cultural features shaped Spanish colonial winery labor. According to Deagan, the adoption of Indian technology reflected the strong influence of Indian women. The more limited adoption of Aymara winery labor at the Mispangua wineries, therefore, may reflect the more limited influence of Aymara women as male-dominated wine-making activities.

Distilling is the third major form of alcohol production and archaeologists have recovered evidence of early distilling operations. For example, at Ixcotelco, Carter (1982:47) described the head of an alambic and identified possible non-universally attested distillery. At the nearby seventeenth century Mission a Hacienda near a Virginia settlement destroyed during the Powhatan Indian uprising in 1622, Peter Mark Hume (1982: 824-1825) also recovered locally made, engraved earthenware distillation head.

Archaeologists have addressed non-distilling wine-making sites in the Caribbean. For example, Conrad Cordova (1994) investigated the eighteenth and nineteenth century winemaking at Barry's Hope plantation. Antiquaries recorded the placement of the plantation's wine distillery within the larger sugar plantation complex. In Tobago, Christopher Clement (1997) conducted an extensive survey of sugar plantations and recorded details about non-



difficulties. According to Clement, the need for water for rum stilling was so crucial that it determined the placement of sugar factories: Clement wrote,

Of the 22 sugar factories examined not during the survey, 19 are located adjacent to a water source sufficient to provide water for rum production.... This reliance on water for rum making symbolized the consequences of factories on water resources, forest fires, or diseases that could be caused by canal in areas of high topographic relief (Clement 1993:93–96).

Several other archaeological and architectural surveys in the Caribbean have produced fine drawings of sugar plantation-looking houses and rum distilleries (Jacks 1983, Cress and Nelson 1979, Coombs 1983, Higgins 1975, 1998, Peñalosa 1983, St. John's Historical Society 1988).

Rum distilleries have also been excavated in North America. For example, Henry Swisher (1988) unearthed an eighteenth-century rum distillery under the ground in the Bronx, Massachusetts. Unlike the field and factory operations found in the Caribbean, rum distilling in New England was an early colonial enterprise that relied on imported Caribbean molasses. Swisher explained how the Brown distillery used the mill pond to dispose of distillery effluents. Thus, as in Tobago, the need for water determined the placement of rum distilling operations in eighteenth-century Boston.

Archaeologists have explored other types of alcohol distilling. At the late eighteenth-century nineteenth-century farmstead of Thomas Harden in Cornwick Township, New Jersey, Abby Fendler (1991: 20) and Cheryl Holt (1991: 47) used botanical remains to identify whiskey distilling. According to Fendler, distilling supplemented their revenues and helped establish a web of social and economic relations that strengthened Harden's role in the community. Archaeologists excavated the small distillery at George Washington's home, Mount Vernon, which also supplemented the estate's revenues. However, while distilling was a supplementary exercise at Harden's farmstead and Mount Vernon, it was a primary activity at Voyslagos estate in South Africa (Marek Holt and Schrey 1995). Excavations of the Voyslagos estate's wine cellar confirmed documentary reports of heavily distilling at the site. Archaeological evidence helped locate the Voyslagos heavily

still and show the architectural signature of a heavily distilling operation. David Schelton (2002: 18–19) presented a nineteenth-century heavily distillery in the urban center of Buenos Aires, Argentina. As he wrote, the Buenos Aires heavily distillery was an independent operation that relied on imported raw materials from the countryside and received outside of the city. The distillery operated within a regulated urban landscape and was part of a series of buildings, which included the owner's house and greenhouse.

Environmental conditions also shape the demand for alcoholic beverages. The historical anthropologist, ability to locate people in their natural environment can help provide clues to the emergence of alcohol making in different cultural settlements. For example, Aubrey Romo (1995: 145) argued that one of the most notable colonists established a brewery at Zamora was to avoid having to drink "Zamora's water only leads to water." Peter Page (1997: 85–86) argued that alcohol bottles found at nineteenth-century sites in Newfoundland reflected the popular belief that alcoholic beverages warmed the body. According to Page, the perceived warming effect of alcohol led settlers to drink it in a cold and wet climate of Newfoundland.

Botanical, physical, pollen, and mineral spectroscopic analysis can help reveal the types of materials being brewed fermented, not distilled. This evidence could be used to evaluate whether settlers were adapting to the New World by exploiting local resources or transferring Old World crops to new locations for the purpose of replicating familiar alcoholic beverages. Such evidence could also reveal the extent to which large plantations and small farmers were willing to diversify commercial crops in order to provide food for fermentable crops, such as corn, barley, grapes, apples, and pomegranates.

Archaeological evidence can show the changing nature of alcohol making technology as well as highlight the social, economic, and political forces that transformed a home cooking industry that supplemented household economies into an industrial sector that produced a primary alcoholic commodity. Evidence might show how Old World distilling technology was modified for the distillation of New World crops. For example,

the presence of a locally made alcohol bowl at the Master's Household site may reflect slight differences in production or design. Old World distilling technology in New World beer manufacture. The location of distilleries on the landscape may reveal whether these operations were central to the larger agro-archaeological complex or simply supplemental endeavors. The installation of a distilling plant at the Harper's Ferry brewery may reveal the owner's desire to test a more industrial brewery within a large-scale industrial complex. The presence of a rum distillery on a Volage sugar plantation may correlate with increasing world demand for alcohol. The new alcohol production in periods of the New World may tell us about the high price of imported beverages, their inability to meet demand, and their availability. The use of wine making in Peru, for example, may reflect the inadequacy of the Spanish wine and locally made. The use of whiskey and rum distilling in some areas may correlate with declining market prices for grain offerings and their related the planters' attempts to efficiently store these commodities as liquid form.

### Trade and Transport

Alcohol as a valuable liquid. If not consumed immediately after production, it must be stored in durable, airtight containers. Alcohol has also been a valuable commodity and a prominent item of trade. The volatile and valuable nature of alcohol has led to the production of a rich material culture for its storage and transport. Glass bottles, ceramic storage containers, and reinforced wooden casks not only served the immediate purpose of storage and transport, but these materials remain within the archaeological record and have helped archaeologists identify trade. Probably the most prolific research comes from archaeologists working at ancient sites in Egypt, Greece, and Rome who have used wine amphorae to trace the extent of the Southern European and Mediterranean wine trade (Durrant 1999; Peacock and Williams 1986). However, the evidence for alcohol trading is not limited to the classical world.

The material culture of alcohol storage and transport is evident in numerous historical sites and archaeologists have used this information to explore commercial

networks in the modern world. For example, in Newfoundland, the overwhelming presence of alcohol bottles at seventeenth century sites led Pope (1987) to propound the link-for-alcohol trade between Newfoundland and Europe. According to Pope, the alcohol trade in Newfoundland followed a pattern established in Elsewhere Europe in which link were sold to merchants in France in exchange for French wine and brandy. The high demand for link in Europe and the direct nature of the trade meant the timely delivery of the purveyor of the Atlantic world had access to alcoholic beverages usually reserved for metropolitan elites. In New England, Steven Pringle (1999) argued that the presence of Portuguese tin glazed earthenware at seventeenth century British colonial sites showed the secondary use of containers for Portuguese wine made in North America. The ubiquitous presence of Roman storage jars at Spanish colonial sites highlights the importance of the Spanish wine trade to the Americas and documents the emergence of centrally organized workshops for the production of wine transport vessels (Arcey 1998).

Archaeologists have also used the material culture of alcohol storage and transport to trace alcohol trade patterns within the Americas. For example, Rose and Smith (1992) explored the seventeenth and eighteenth century Port wine trade in New Spain, Mexico, and – especially – the Port wine trading regions in present-day Bolivia. According to Rose and Smith, in the eighteenth century, the Miqueque Valley produced between 60–80% of the wine and brandy consumed in the Peruvian region. Rose and Smith's analysis noted heavily co-ordinated activities, especially locally made and dated earthenware jars (barriles) used to transport Peruvian wine and brandy. Most of the jars dated to the eighteenth century reflecting the expansion of the wine and, after 1750, brandy trade.

North America was one of the few colonies areas that did not produce alcohol prior to European contact. Once Native North Americans were introduced to alcoholic beverages, however, the European alcohol trade became central to the economic systems of many of the early colonists. Archaeological evidence of alcohol trading reveals the extent to which Native Americans participated in the global economic system. Archaeologists have

recovered when bottles and Spanish olive jars from Native Americans sites in Spanish colonial Florida, which shed light on Spanish Indianethnobotany and share the participation of Native Americans in the emerging Atlantic economy (Daguer 1972; Fairbanks 1972:167-168,175-179; Barrio 1979:44; Smith and Gertels 1993:14). For example, Daguer (1972) examined the frequency of glazed Spanish olive jars from inland and coastal sites in north central Florida. According to Daguer:

The higher proportion of glazed olive jars in inland sites might be explained as an attempt by the Spanish to use the most important containers for the long overland journey, or perhaps that olive jars going to inland sites were used mainly to transport liquids such as wine and oil.

(Daguer 1972:18)

Amy Burdett (1984; Hoffman 1997:26) noted that, at the nineteenth century, Caribbean rum was one of the main trade items with Native Americans who lived near St. Augustine.

Cuba likewise in the Caribbean, unlike their North American counterparts, had a strong tradition of alcohol use prior to European exploration and settlement. European rum and spirits fed the Caribbean's growing demand for alcohol. Levens (Horsychurch 1989) emphasized the presence of rum bottles glass on colonial-period Caribbean in Dominica in order to show the contacts which alcohol constituted trade between Europeans and Caribs in the early years of European exploration. It is generally accepted that the Taino, the other major Amerindian group in the Caribbean at the time of European contact, did not produce alcohol (Rouse 1992:12,13; Rouse 1996:11). However, Peter Hains (pers. comm.) believes rumstone bottles recovered from Taino sites may have been used to store beer.

Archaeological evidence of alcohol use may have further highlight interactions between Europeans and Native Americans. For example, Paul Farnsworth (1992:36) developed a classification system for measuring culture change among Native Americans as late eighteenth and early nineteenth century Spanish colonial missions sites in California. According to Farnsworth, rum bottle evidence indicated the adoption of "new [Spanish] cultural elements" and thus showed Native American acculturation. Yet, despite the presence of rum bottles, Farnsworth argued that nineteenth Native Americans were still

to "maximum high level of colonialist culture" (see also Bloom 1972:46). As late eighteenth and early nineteenth century Spanish Indian sites in Texas, European and American sites and Indian burials represented a large period of archaeological investigation and reflected the penetration of Western cultural elements into traditional Native society (Parks 1994). Edward van der Pijpen (1972) investigated precolonial Japanese sake use in the Drake village site in northern California, which may shed light on the nineteenth century Monte Caloca site in the Pacific and the adoption of a new context by ill-will Indians and other Native American groups in the California coast. Large terra-cotta storage jars found at Drake village may also indicate the importance of wine.

### *Alcohol and Foodways*

Historical archaeologists frequently treat alcohol drinking, though not always explicitly, as part of the foodways subcategory. Foodway studies concentrate on the material culture of beverages and foodstuffs, especially within the context of formal dining. This emphasis on the material culture of eating and drinking, rather than on the specific foods and beverages, highlights the materialist tradition of foodway studies. Historical archaeology emphasizes on "technology" (Parks 1976, 1977) and "materiality" (Binns 1984; Inchausti 1984) archaeology compels archaeologists to view the more practical dietary, rather than symbolic, aspects of alcohol drinking. Moreover, the material culture of alcohol use, including glass containers and glass drinking cups, mugs, and bottles, specifically expresses the more material and functional aspects of drinking.

Foodway context studies have been particularly popular at British colonial sites in North America. For example, in 1973 James Davis examined context archaeology from Plymouth, Massachusetts between 1620 and 1630 in order to show changing foodway patterns. As stated in Davis (1973:16): "While it may be shown that certain contexts of early America probably belonged partly or wholly to other subsystems, the majority were closely involved with the material aspects of foodways." Davis early involvement drinking and eating vessels and along with other subsistence planters operating in Plymouth (1620-

1600, 1600-1700, and 1700-1850). Davis argued that the changes identified at each phase reflected an ideological shift from a communal to a more individual pattern-of-drinking and eating. According to Davis, common drinking and eating vessels were both rare in the early (communal) phase, but the increasing number of personal drinking vessels in the initial phase indicated a growing trend toward individual self-feeding. This hypothesis was supported by Mary Beaudry's (1983) analysis of New England prehistoric ceramic evidence. Although Davis did not specifically concern himself with the role of drinking in burial or ritual feasting and shared how patterns of ancient drinking vessels might be relevant in the broader context of ideological change.

In the Chesapeake, seventeenth century prehistoric ceramic evidence contradicted the patterns identified by Davis in Plymouth. For example, Mary Beaudry et al. (1983) challenged Davis's model of communal feasting and argued that seventeenth-century Easterns, not an archaeological site, but prehistoric prehistoric ceramics (Chesley 1989). In fact, Beaudry et al. found a paucity of drinking vessels in the prehistoric ceramics, which is consistent with Davis's assertion that drinking patterns, rather than eating patterns, exhibited a greater tendency toward communal feasting. Moreover, Beaudry et al. (1983:25) believed class differences had little influence on the number of drinking vessels per household and that "the number of drinking vessels remained consistently small across the economic continuum." Further, the paucity of prehistoric drinking vessels in the prehistoric ceramics led Beaudry et al. (1983:25) to conclude that "unless vessels found were personal or domestic or, in the modified household model, the available conclusion is that drinking vessels were being stored, if not well hidden, at least well sequestered when they were not being used." In 1981, Beaudry (1984) also showed how the shape and quality used in the prehistoric ceramics to drink highlighted drinking vessels highlighted the communal and communal nature of drink.

Gary Wheeler Stone (1988) identified a similar scarcity of drinking vessels in seventeenth century prehistoric ceramics in Florida. Mary + City. According to Stone, the

small number of private drinking vessels reflected a communal drinking pattern. Morrison Stone (1983: 75) identified drinking vessels specifically designed for sharing and wrote, "these shared vessels were index of a medieval European economy of scarcity, when not just cups, but architectural space, tools, draft animals, and land were shared extensively." Stone (1983: 75) argued that shared drinking vessels contributed to the creation of "cultures with distinctly corporate characteristics."

Yarnick (1990) observed the communal nature of seventeenth-century drinking vessels (Chenopods). According to Yarnick, "until the eighteenth century, individual drink using communal vessels, experimentally known as 'the social bowl.'" Yarnick notes that communal pattern as part of a "folk." Yarnick also argued that the aforementioned individualized design greatly followed the late seventeenth-century after emergence of British ceramic influences. However, Yarnick, like Stone, believed that the desire for individualized drinking vessels reflected a shift in social values from a conservative "folk" to a progressive "middle" highway transition.

South (Smith) (1977) developed a system of artifact patterning that approached drinking from a somewhat similar highway model. Wine bottles, rum bottles, and common drinking vessels were listed as part of the "baroque artifact group." According to South (1977: 95), these artifacts were associated with food preparation, storage, and consumption, or "behavioral activity primarily centered on the kitchen." Unfortunately, the act of drinking was lost when individual vessels such a broad artifact category. However, South believed that artifact categories should be modified in order to isolate certain variables and thus address specific issues, including alcohol use. For example, South isolated bottle glass from the earlier assemblages of domestic and domestic wares as well as the Revolutionary War period use at Fort Mifflin. South (1977: 95) concluded, "By excluding bottle glass, South was able to identify relatively high rates of alcohol use at Fort Mifflin." Similarly, Glass (Buckman and Nam Rothchild) (1984) modified South's artifact pattern model in order to differentiate between rural and urban bottle assemblages. Buckman and



Elaborate/designed artifact categories that could specifically account for smoking/drinking pipes, smoking/drinking glasses and holders, and their consumption (consumers), which they believed would help distinguish the different functions of oral and urban forms.

Addressing alcohol use within the context of foodways has been a valuable approach; yet, while historical archaeologists have thoroughly explored eating behaviors, drink has received much less attention. The marginal treatment of drink reflects much in the purview of cultural anthropology. Cultural anthropologists have emphasized eating patterns and the role of food in society. However, a growing number of cultural anthropologists have challenged the field to turn the study of drink as a distinctive anthropological endeavor (de Garos and de Garos 2008; Douglas 1987; Heath 1994, 1997, 2005; Marshall 1979). Results from these anthropological studies on drink may provide archaeologists with the theoretical tools necessary to properly address alcohol use. *Sociability*

In 1977, Davis argued that the neo-renaissance reflected the urban, colonial, and expansion of the Qing dynasty, which stressed the primacy of the individual and subordinated the communal. However, the neo-renaissance was also a communal event. Participants prepared tea from a communal pot and drank together from matching cups and saucers. Shared drinking, like tea drinking, was usually part of a larger social event. Communal punch bowls and drinking cups symbolize the link between alcohol and sociability. The townhouse *pro-cave* where also helped define the context of sociability. The national culture and structures specifically designed for the group consumption of alcoholic beverages reinforced the sociable nature of drink.

Archaeologists have directed much attention to locating and describing structures and dwellings designed for alcohol consumption. Taverns, bars, saloons, saloons, clubs, brewery houses, and other sites of social drinking provide archaeologists with numerous opportunities to explore alcohol use and its role in governing the appropriate atmosphere for sociability. In addition, drinking establishments provided public space for

the display of numerous items. Shared religious feelings of male worshippers and, therefore, increased in financial value of these male-oriented places.

Twentieth-century material culture has been a popular subject of numerous archaeological studies. For example, Noel Holten (1942) wrote extensively on items of furniture from Port Royal, Jamaica and described the use of particular plants for specific decorative details. In 1982, Donald Hamilton conducted excavations at Port Royal and concludes dwelling that may have been a tavern. Evidence indicated an elaborately decorated hall and kitchen facilities (Hamilton and Woodward 1984:65). T. Charles Craven (2000) explored the function of eighteenth and early nineteenth century public rooms in England and Wales and used this evidence to trace regional marketing networks.

Archaeologists have compared tavern artifact assemblages with those from domestic sites. For example, in Plymouth, Massachusetts, Kathleen Bingley (1988) compared a seventeenth and eighteenth century tavern artifact assemblage with the domestic assemblage of a previous farmer of the same period. According to Bingley, the high number of large bowls, and other drinking related vessels recovered from the tavern showed the primary function of the tavern as a place that dispensed alcohol. In contrast, the domestic site possessed a much more varied ceramic assemblage. Bingley also showed that tavern sites had a higher frequency of clay tobacco pipes. Davis (1995:104) made similar observations about the high number of clay tobacco pipes recovered from a seventeenth century tavern site at Flowerton Hundred, Virginia. Bingley concluded that occupational differences resulted in greater reliance on ceramic assemblages than economic status. That, although the domestic assemblage had a high concentration of coarse earthenware common associated with food storage and preparation and a smaller overall number of ceramic vessels, iron glass, and specialized glassware, the variation reflected the occupational differences of the owners rather than the economic status of the residents at the time they lived.

John King (1988) compared domestic and tavern assemblages at the seventeenth century St. John's site in St. Mary's City, Md. with Bingley. King found a higher

percentage of drinking vessels during the tavern phase. However, the tavern assemblage also contained a relatively high percentage of vessels associated with food storage. Julie Krag and Henry Miller (1987) also conducted later site investigations at the Queen Yaw Swenagen site in St. Mary's City. The Yaw Swenagen site was a late seventeenth and early eighteenth-century domestic site and outbuilding. Krag and Miller investigated the spatial distributions of artifacts at the site, which revealed functional differences between the main house and outbuilding. The outbuilding assemblage possessed a large number of drinking vessels and tobacco pipes and a low percentage of dining vessels, which led Krag and Miller to conclude that the outbuilding assemblage probably represented Yaw Swenagen's outbuilding. Artifacts from the outbuilding were similar to those recovered from other tavern sites and documentary evidence confirms the presence of a coffeehouse at the site. Although called a coffeehouse, alcohol may have been the primary drink served at the site.

In Jamaica, Douglas Armstrong (1990: 138) made similar observations about assemblages at the Great Hall slave village. According to Armstrong, the large numbers of glass wine bottle glass, beer bottle glass, and numerous drinking mug fragments showed that one house area was probably the remains of a "local village bar or liquor shop." Bottle glass fragments represented nearly half of the broken artifact assemblage from the site and differed from other sites in the village, which possessed more varied common assemblages.

Archaeological evidence has helped clarify the phenomenon of tavern trade landscapes. For example, Henry Miller (1987) examined the urban landscape of St. Mary's City and showed an entirely foreign design in what was previously thought to be an unplanned and poorly organized urban center. Three of the four buildings located in the center of the foreign-designed city were taverns. Although they were not elaborate or high profile buildings, they were located in the center of town. The concentration of tavern trade centers of towns may be common in early British-colonial settlements. In 1556, Cortes also discovered two centrally located seventeenth-century residences at Jamestown

Mark Lounsbury and Ellen Harry (1996) interpreted the location of St. Mary's City as their strategic place to demonstrate power in the purgative layout of urban space. Although not explicitly addressed in their study, the taverns in St. Mary's City were located in the center of town and farthest away from the marketplace and church, which were located at the edges of the town. The placement of taverns in center of St. Mary's City may reflect a conscious effort to distance social drinking from the watchful eyes of church and state. Locating the tavern in the heart of St. Mary's City may have also been a good economic strategy for luring travelers deeper into the town where they might spend their money on drink, as well as a variety of other goods and services. The central location of the tavern in St. Mary's City also suggests that town planners attempted to concentrate socializing within the center of St. Mary's City and create a social heart in the town.

An example is the centralized location of taverns in Jamestown and St. Mary's City. The tavern in the eighteenth century Murrenville town of Salem, North Carolina was moved from its central location to the town's periphery. Murrenville were a German-speaking religious sect. According to Rana Thomas (1994: 15) moving the tavern to the town's periphery reflected the Murrenville leadership's desire to create distance between Murrenville residents and Anglo-American neighbors and visitors. The tavern made Murrenville part of the larger American society, yet, by placing it on the town's periphery, Murrenville leaders maintained its relative outside cultural status. Thus, according to Thomas, the peripheral location of the tavern placed social interaction between Murrenville and Anglo-Americans at the edge of town, and opened a strategy of "inclusion and exclusion."

Archaeologists have also examined the layout of different taverns. For example, Beckman and Rothchild (1994) compared four 17th-century gathering institutions to identify cultural differences between two rural and two urban locations in seventeenth century North America. According to Beckman and Rothchild, urban exemplars from urban taverns possessed a greater proportion of smoking and drinking related culture indicating that urban taverns were specialized places for socializing. In contrast, the rural tavern

researchers possessed a wider variety of vessels from indicating that rural taverns were less specialized and functioned as eating and drinking establishments where patrons could simply reserve a range of accommodations including food, drink, and overnight lodging.

Taverns certainly were occasionally forced to maintain space at times when necessary. For example, in Charleston, South Carolina, archaeological excavations revealed that, in the eighteenth and early nineteenth centuries, taverns sometimes served the dual purpose of *drinking establishments and domestic dwelling*. According to Martin Starna and James Calhoun (1988:37), "in response to the physical constraints and high-cost of domestic land in the commercial zone of the city, inns and taverns were often used for both residential and commercial purposes." Similarly, Elizabeth Fries and Stephanie Dennis (2008) investigated a nineteenth-century boardinghouse located in Buffalo, New York that also operated as a saloon. Life for workers at the independent boardinghouse/inn in Buffalo differed from corporate-owned boardinghouses, such as the Royal Station Inn in Lowell, Massachusetts, where employers established strict anti-alcohol rules that were meant to regulate alcohol use among workers. Robert Flinn (1996:64-65) used archaeological evidence to argue that drinking among New England slaves who lived in the homes of their masters was highly regulated. As a result, slaves were forced to engage in drinking and other indulgences at secret meeting places and taverns away from the view of their masters.

Several taverns have been excavated at eighteenth-century sites in Williamsburg, Virginia. For example, in 1815 (1866), Noel Hume (1968) examined *Waldenbury's* tavern, which was one of the first major archaeological studies of taverns in VA. Noel Hume reconstructed considerable amounts of information about the variety of alcoholic beverages available to patrons and specific material culture of taverns. Among the more material finds was the presence of whole glass glass wine bottles containing large amounts of cherry pits. According to Noel Hume, these cherry-filled bottles may have been used to make a type of liquor. Archaeologists in Williamsburg have excavated several other taverns, including the *King's Arms Tavern* (Kugler 1982), *Walden Tavern* (Dennis 1996)

Brown et al. 1990), and Raleigh's Tavern. Gaming was popular pastime at these taverns and, for example, excavations at Raleigh's Tavern revealed a quarter-century-old circular drain in the backyard area that was probably used to drain the gaming table.

The Williamsburg tavern assemblages have been compared with the assemblages from an eighteenth century Williamsburg coffeehouse. Mary-Caroline McConis et al. (2008) argued that coffeehouses served as social channels and that archaeological remains, including evidence of a Chinese porcelain tea set, tea caddies, and European folding chairs, revealed the high status of coffeehouse patrons. They also speculated that other foods, such as a vegetable and fudge tarts of a local bakery's creation, shared their coffeehouse clientele as cultural assemblages for the town's wealthiest elite. Such strategy, they claimed, contrasted with the more common cultural elements, such as smoking pipes, found in the town's taverns. Moreover, McConis et al. viewed the location of the coffeehouse within Williamsburg's landscape, its close proximity to the Capitol building, suggests that the coffeehouse owner may have attempted to cater to the needs of a more elite clientele in this politically relevant city. But, taverns were also located near the Capitol building and competition among the town's many tavern owners may have led some, such as the coffeehouse owner, to speculate to cater to elite and maintain a class clientele.

Scholars have also used the form of archaeological study. Margaret Parker (1992: 108) argued that tobacco in Brandon Valley, Florida, an early mission in St. Mary's City, represented the public sphere of the town's built environment. Peter Schulte and Marie Goss (2011) examined faunal remains from seventeenth century urban sites in Sacramento, California in order to determine the "various economic status of the depending populations." Among the items investigated were the city jail, two saloons, and a fish house. The presence of multiple value cuts of meat in faunal assemblages from the saloons showed that the socioeconomic rank of the two saloons fell as expected, between the jail and hotel assemblages. The saloon faunal assemblages also reflected greater use of carcass portions, which would have facilitated the preparation of meals. According to Schulte and Goss, the

presence of music reflected the practice of saloons owners to provide free lunches to customers. Drinks were easy to prepare and, thus, there is also free lunch food. In contrast, the formal restaurant claimed that the hotel provided more expensive food of meat.

Although drinking establishments were predominantly created toward male drinking, women were prominent at these sites. Women have traditionally played a central role in the distribution of alcohol in male-oriented drinking establishments. Women-front servers, hosts of house owners, prostitutes and hostesses were an integral part of social and leisure life (Tandy 1987: 56-11). Material culture may shed light on the presence of women within male-oriented drinking establishments and help us understand their particular roles within those contexts. Brothels, for example, have provided opportunities to explore the connection between women and alcohol. A nineteenth-century penny press article in the *Free Press* section of New York discussed 60 glauz, bathhouse and a variety of other goods associated with alcohol consumption (Tandy 1988). Brothels were also recovered from late nineteenth century brothel sites in Washington D.C. According to Denise Schuler (1981: 89) the evidence showed that "most" brothels served alcohol. The use of alcohol by women at brothels may reveal the ways women coped with the realities of prostitution. In addition, alcohol-related male, adolescents and prostitutes may have used alcohol to lessen the realities of brothel patronage. Alcohol use within the context of prostitution probably also enhanced the male patron's feelings of masculinity.

A wide variety of material and ideologocalization spread the use of centrally-located and usually male-oriented drinking establishments. W. Scott Hulse (1996) argued that cramped and poor living conditions contributed to the popularity of saloons in nineteenth century Paris. Hulse also stressed the need for entertainment, especially in the case of an increasing working urbanization that accompanied the industrial revolution in France. Drinking establishments provided a feeling of escape from poor living and working conditions and created a venue for people with common plight to share their experiences. Archaeologists may be able to correlate the number of drinking establishments with the

longtail working conditions of local subsistence. In addition, drinking establishments often possessed special amenities not available to the average person. Politician Markiya Powers (1998) argued that the popularity of the nineteenth and early twentieth century workingman's saloon in North America was, at least in part, due to the presence of planned amenities which could not be found at home. Archaeologists are in a good position to identify the particular amenities offered by drinking establishments, which varied local establishments from home. Moreover, it may be possible to test the impact of new amenities such as punch bowls and billiard tables, or increasing availability and the growth of women saloons. Archaeologists can also investigate the purposes of different drinking establishments and show how their functions changed over time. Further, archaeologists can investigate the placement of drinking establishments in the cultural landscape.

### *Worked and the Material Culture of Social Class*

Historians and anthropologists have investigated the relationship between alcohol use and socioeconomic class in the modern world. In their studies, class and working class drinking is typically contrasted with middle class temperance. The public drinking of working classes is also distinguished from the private drinking of wealthy elite. Moreover, researchers have explored the way social classes use specific types of alcoholic beverages to help define class identity and strengthen group boundaries. Historical archaeologists have also used the material culture of alcohol to interpret class differences.

Archaeologists reached into the lives of nineteenth and early twentieth century workers in the Boston mill in Lowell, Massachusetts to produce information about local studies on class (Bensley 1985, 1993; Bensley, Cook, and Mieszkowski 1993; Bensley and Mieszkowski 1997; Bond 1944, 1989a, 1989b; Eaton 1973; Mieszkowski, Rising, and Bensley 1996). Karl Marx found merit in much of this early research, which was expanded upon by later researchers. According to Bensley (1986), mill owners practiced a system of social policing that sought to restrict the drinking of mill workers. This "corporate paternalism" was meant to produce a disciplined diligent work force and



where the likelihood of liquor sales. Yet, archaeological evidence from the mill

founder plans revealed that attempts to curb drinking were not entirely successful:

Just as boardinghouse keepers did not always adhere strictly to company rules, the preliminary analysis of artifacts revealed the little bit of one of the liquor wells shows that there were many ways in which boardinghouse keepers and workers sought to personalize their surroundings and to exercise control over their own lives. The evidence for the consumption of alcoholic beverages is a: liquor wells and lead bottles; two craps, wine glass and spoons of silver (Figures); evidence of one rule for corporations never relaxed.

(Bussell and McCann III, 1987: 136)

This alcohol use at the boardinghouses showed worker resistance to the debasing effects of industrial labor and corporate attempts to control the workers' leisure time:

Both Brittman and Goble Adams (1994) identified alcohol consumption among late nineteenth and early twentieth-century urban workers in northern Ohio. According to Brittman and Goble, archaeological evidence indicated that urban workers drank alcoholic beverages, despite attempts by employers to curb alcohol use at the mining camps. Similarly, Lee Ann Ward (1999) investigated class-based alcohol use at a nineteenth-century urban dwelling in Brighton, New York. Ward found that, in contrast to the employer's house, the urban dwelling possessed a high frequency of liquor bottles. As with the East mill boardinghouses, Ward claimed that the relatively high concentration of liquor bottles at the urban dwelling reflected working class resistance to the employer's restrictive controls. In particular, Ward (1999: 61–67) argued that the higher concentration of liquor bottles at the urban structure meant "workers may have had more freedom as personal behavior than domestic who lived under the roof of their employer." Moreover, Ward believed that urban drinking helped define a working class culture that rejected corporate values.

Archaeological evidence from a middle class household in nineteenth-century Brooklyn, New York, also shows how alcohol helped define class boundaries. According to Paul Rehak and Stephen Bergman (1999: 72), the absence of alcohol bottles at two households indicated that they "conformed to a mainstream middle-class temperance stance." A small number of alcohol bottles recovered from the other four households

suggested in Backus and Brighton only occasional and modest levels of drinking. However, Backus and Brighton reported that only the presence of a small number of alcohol bottles showed that these four middle-class households did not conform to the ideal of total abstinence advocated by middle-class temperance reformers.

Backus and Brighton compared their findings with evidence from four nineteenth-century working-class households in the Five Points neighborhood of New York, a neighborhood primarily composed of Irish and German immigrants. Backus and Brighton found that, although one household had a relatively low number of alcohol-related vessels, the other three had higher concentrations than observed at the middle-class households in Brooklyn. Backus and Brighton interpreted two other households from their study from nineteenth-century native-born and, presumably, middle-class households from Greenwich, New York. The two Greenwich ones possessed alcohol-related vessels in numbers similar to those found in the immigrant working-class area of Five Points. Backus and Brighton concluded: "In light of the similar consumption patterns visible in both native-born and immigrant working-class households, *Americanization*'s emphasis on Irish and German immigrants supports individualism."<sup>16</sup> In fact, Backus and Brighton believed that the discovery of a cup bearing the image of Irish temperance reformer Thomas Ingham was evidence of temperance reformers within the immigrant working-class community in Five Points (see also Brothman 1997). Finally, all the New York households were compared with evidence from the Boston mill households in order to show the relatively low level of alcohol use at all the New York sites.

Backus and Brighton used the evidence to question the purity of middle-class temperance and challenge notions about excessive drinking among working-class immigrants. They suggested stereotypes about the drinking practices of working-class immigrants, especially Irish, were unrealistic as they immigrants and non-Catholic protestant and middle-class the dominant position of native-born middle-class Americans in the making social hierarchy.

Using the evidence from the working class Irish men's proboscideals at Five Points, Heather Gregg (1999: 54) argued that the significant drop in the percentage of wine and liquor bottles "may reflect the restraining effects that Catholic temperance practices, as well as Minors' Laity, had on the Irish Population." Gregg (1999: 89-90) also praised Becker and Humphrey's work as an example of how archaeologists can challenge "common" assumptions and develop an alternative working class interpretation. According to Gregg:

A common manifestation of archaeological bias with ethnic levels is the marginalization of liquor and medicinal bottles from Irish sites. (Because of what may be deemed to be) of liquor or medicinal bottles commonly creates a dimension of alcoholism among the Irish (see references cited). While archaeologists should support discussions about health and sickness among immigrants from the Irish lands through disease, ethnic identity issues regarding an ethnic manifestation, and when often visited in immigrant and secondary neighborhoods, this has generally led to a regional, homogenizing archaeological lens commonly or automatically chosen to the situation of ethnic areas of material culture as a cultural development passed down through historical stages.

(Gregg 1999: 92-93)

Similar concerns probably led Minors, Zaring, and Penabaz to qualify their statements about drinking as a leisure activity at the heavily Irish-populated foot wall neighborhoods. According to Minors, Zaring, and Penabaz (1999: 74) drinking was just one of many leisure activities in which Irish workers engaged and there may have been many individuals who did not drink. Also, they argued that drinking and recreation helped "provide intellectual evidence and thus, become the focus of our investigations of leisure behavior."

Working class drinking highlights the numerous problems associated with industrial work regimes (Hess 1988; Cornfield 1996; Ransburg 1979; Tyrell 1979). One of the main aspects of industrialization was the segmentation of life into periods of work and leisure. In an agrarian system, alcohol was an accepted part of both work and leisure. Industrialization made drinking acceptable only during leisure hours, which helped give rise to the weekend binge. According to anthropologist Joseph Cornfield (1996: 62-63) drinking defines the boundary between work and play. The ideology of temperance identified as later like the Prohibition efforts may have been almost as challenging as

particular policies of employers. However, they also reflect a more general pattern of resistance to new work regimes, especially if workers came from agrarian backgrounds.

In the nineteenth and early twentieth centuries, temperance reform had a major impact in North America. Alice Rossi (1965) examined nineteenth-century contributions to show how temperance reformers discouraged alcohol and reshaped American history before. An influential *drinking* theory of the role of alcohol expressed group identity. Gerald Thomas (1988) cited in Pettit and Dorman (2000: 62) reviewed a letter concerning a local meeting house built from a nineteenth-century boardinghouse in Buffalo, New York, which may reflect temperance ideas that helped "solidify social bonds between individuals."

Temperance reform was tightly linked to middle class ideas. Intellectuals and other highly idealized workers were sometimes used to champion temperance reform. For example, Wood (1986) argued that large numbers of patent medicine bottles found in late nineteenth-century Boston still boardinghouses indicated current alcohol consumption. Similarly, at the Flat Irons neighborhood in New York, Thomas (1988) argued that the patent medicine bottles recovered from working-class Irish immigrants often were evidence that workers drank, yet revealed the desires and group of middle class reformers and neighborhood-temperance advocates (see also Kaskas and Bingham 1995). The resulting alcohol use linked patent medicines was not limited to the working classes. Jane Geymer (1990: 62) argued that, despite the low number of alcohol bottles found in the nineteenth century homes of middle class families in New York, the large number of patent medicines indicated high levels of alcohol use. Patent medicines also provided women with opportunities to drink and conversate with others about it more comfortably.

Class distinctions based on alcohol use are usually subtle than the visible distinction. The types of alcoholic beverages consumed often reveal social and class distinctions. For example, at remote mining camps in Northern Chile, Bittencourt and Gadea (1984) reviewed locally made alcoholic beverages for their as "associated with the workers' work habits and reported alcoholic beverages for the work problems of repression and

employees. As a result, Bateman and Gertis argued that the direct locally made items consumed by visitors contrasted with the best consumption of imported goods of the employees and, thus, reflected the construction of class boundaries. Charles Fries (1966) also compared class differences between middle-ranking camps as early nineteenth-century Trinidadians and argued that the camp with the highest food quantity and quality would attract which group of servants was most successful at developing trade with the local Tjigona Indians. Fries wrote "the [the] trading/company with better access to trade and more influence with local administrators would logically be able to attract the best houses and command the most preferred food items." Fries then examined some site status differences within the more successful company camp. Documentary evidence indicated that the better status in the company camp drank poorer quality alcohol from large metal jugs in the Indian trade while individuals of a higher status within the trading company consumed drink bottled spirits. Fries initially argued that one structure was associated with lower status but visitors, but the presence of more and higher quality glass indicated the higher status of the occupants and ruled out the structure as the dwelling of lower class free traders.

The consumption of higher quality alcohol beverages, however, is not always an indicator of wealth. In nineteenth-century New Zealand, the high trade to Europe gave Britons access to expensive French wine and brandy. According to Pope (1983: 23-25) British officials and large landowners in New Zealand disapproved of the Indians as access to alcohol in drink and food to prevent them from employing missionaries they considered degrades their socio-economic position. However, trade patterns and the desire for "fine" drinks in a world where means that visitors were more successful.

Archaeologists have inferred site status from particular alcohol-related artifacts. For example, Robert Jolly (1978) was disappointed to recover only 3 wine glasses during underwater excavations at Port Royal, Jamaica. Jolly hypothesized that the excavations must have been conducted into a section of Port Royal that pre-dated the 1855 earthquake. Jolly also believed that small number of wine glasses indicated the excavations

were being conducted in a poor section of Port Royal where residents used less expensive drinking vessels. Noel Hume (1968) challenged Murr's interpretation and argued that the few fine lead drinking glasses recovered from the site were made and probably deposited before the earthquake. Moreover, Noel Hume hypothesized that the discovery of so few drinking glasses should not be surprising since it was likely that the people of Port Royal dropped their bowls in a central location in the town. In contrast to Murr, Noel Hume (1968: 11) deduced from the historic architecture of Port Royal that the glassware recovered was "with a few notable exceptions, what one would expect to find on a site occupiable by reasonably affluent society in the close of the seventeenth century."

Other sources also related to historians that ceramic and porcelain paste bowls (Peach bowls) emerged in the seventeenth century and helped enhance the new social practice of punch drinking. According to Yonish (1992), in the late seventeenth century punchbowls were quickly adopted into Chesapeake households and reflect a shift toward costly dining habits usually reserved for elites. The introduction of punch bowls showed the use of global trade, the spread of fashionable social trends, and the increasing wealth of some Chesapeake colonists. Maderley wrote, from the Portuguese island of Madras, that sometimes a wine is produced of punch, which may help explain why Portuguese (or giant) punchbowls were prominent early on in the Portuguese wine trade to New England (Russett, 1988; Maderley, 1999: 63). Interestingly, the shape of wine wine containers used in punchbowl in the so renowned glass bowl in Boston region (Lester and Lester, 1974).

Other related related artifacts also helped explain site reuse. For example, glass and crystal decanters made in the Netherlands and were generally associated with elite drinking styles. Crystal decanters found in the Nathaniel Russell's eighteenth century house in Charleston, South Carolina led Jordan (1999: 6) to conclude that they were part of a formal dining pattern that allowed Russell to display wealth and refinement. Finally, engraved Meissen decanters were also recovered from the eighteenth century Wetherburn II house in Williamsburg and Thomas Jefferson's house at Monticello

(Klein 1982; Neal 1986; 1996). Possessing a wide variety of drinking vessels was itself a sign of wealth (Scott 1991: 46). Archaeologists have also interpreted bottle size as an indicator of wealth. According to Minardine, Zerning and Rowley (1996: 73), liquor bottles recovered from the Great Hill housewares collection "were small," suggesting that workers could only afford small amounts of wine.<sup>1</sup> However, smaller bottles were also meant to conceal rather than draw out display consumption of the expensive wine housewares.

In examining the public nature of working-class taverns, class class sociability needed to be a private affair. Alcohol historian Suzanne Barrows and Robin Root (1991) argued that taverns often lack evidence of elite drinking patterns because elites tended to drink and socialize in the privacy of their homes. Maureen Mahoney (1999: 48) identified a wide range of alcohol-related glass and ceramic items in early nineteenth-century probate inventories from wealthy residents in Charleston, South Carolina. According to Mahoney, these items helped display elite gentility. Also, Robert Lusk (1995: 17) argued that Chinese porcelain wares were popular among elites in eighteenth-century Charleston and provide nineteenth-century elite sociality. For example, the eighteenth-century probate inventory of Peter Manigault, a Charleston lawyer and planter, listed 83 Chinese porcelain punch bowls. According to Lusk (1995: 12), "Manigault's inventory reflects the primacy placed by colonial Charlestownians on their most desirable town merchandise as well as the vast market of wine required to maintain a stylish eighteenth-century Charleston household." By the end of the eighteenth century, the desire to perform elite drinking rituals and display (inspired by European tastes), such as imported shell punch bowls and crystal wine glasses, was hampered using the small planters in the Carolina Backcountry (Garrow 1994).

Similar displays of wealth and private upper class sociability are evident in the Caribbean. For example, when and liquor bottles dominated the artifact assemblages of James Ogle's late eighteenth and early nineteenth-century plantation residence in Barbados. According to Proffitt-Lewisworth (1996: 17), the artifact assemblage resembled "more a tavern than a parson's residence." David Walters and Desmond Nicholson (1981: 126) wrote

marble observations about Highland House. But before the eighteenth-century onset of the wealthy and politically powerful Cushing family. The presence of alcohol bottles and furniture finding remains recovered from wealthy planter sites in the Caribbean highlights the main preoccupation with alcohol-based profitability and profitability-based among the elite households of Charleston.

Private alcohol-based profitability was not limited to plantation sites. New England merchants also used alcohol to express ideas of elite profitability. For example, at the late seventeenth and early-eighteenth century Turner's House site in Salem, Massachusetts, Lamelle-Goodwin (1999) recovered evidence of alcohol-based profitability. According to Goodwin, the Turners "were an important merchant family in Salem and 'embodied the value of alcoholic entertainment.'" Goodwin interpreted the great number of alcohol-related artifacts as evidence of the "massive" influence of wealthy New England merchants. The high percentage of punch bowls, drinking cups, and even glassware for smoking concluded at merchant sites in Newbury, Massachusetts (chronology cited by Goodwin 1999: 37) and Newport, Rhode Island (Massachusetts 1944-45). Alcohol-based profitability helped construct profitability and legitimize the high status of their merchants in New England.

Archaeologists have also used alcohol to explain and define racial differences. For example, in 1984, John Johnson-Otto (1984) compared glass and stone assemblages at the late eighteenth and nineteenth century Cannon's Point plantation in Georgia. This study relies heavily on the glass bottle evidence. John Jones (1971: 73) and Ivor Ford-Hutch (1974a, 1971-1980) correlated the list of glass bottle bottles with their alcoholic contents and suggested that dark olive green or black glass bottles generally held flavored wines, while light to medium-green glass bottles primarily held waters. Otto wrote,

assuming there is a correlation between the list of the olive green bottles and their contents, the higher frequencies of the black bottle fragments on the slave refuse suggested olive dark liquor brand beverages. Conversely, the higher frequencies of medium green fragments on the overseer and planter sites suggested that plum wine-brand brand wine was

(Otto 1984: 74)



In addition, Otto (1944: 343ff) accepted Noel Holm's notion that square can bottles were more likely to get Otto used this evidence to argue that the higher frequency of can bottles at the white grocery and pharmacy stores revealed that they drink more gas than always did. According to Otto (1944: 343), the different patterns of alcohol use reflected the "higher racial and legal status of pharmacy whites." Otto believed the lower quality-canned beverages associated with the Cannon's Food store, greater and higher quality of wine and gas associated with the white grocery, and pharmacy whites racial and legal control. However, Just Hirsman (1993: 82) challenged the structure of Otto's status patterning, and argued that liquor bottles may simply reflect the stores' private and commercial lives.

Charles Clark and Amy Friedlander (1993) examined racial differences using alcohol-related material from household deposits from two late nineteenth and early twentieth century cities in Washington D.C. The first site was one of a street where the residents were predominantly white. The second site was located one nearby alley which housed predominantly black residents in poorly furnished small row houses units. According to Clark and Friedlander,

a small sample of five individual (beer, glassed) cases only in the (predominantly white) street collections. These choices in the study deposits may be a function of the small sample size. However, it may be due to a combination of lack of money to buy more to put in the glasses and lack of knowledge of, or interest in, the ritual outcome associated with the beverage from these glasses.

(Clark and Friedlander 1993: 24)

Archaeologists investigated links between race, class, and alcohol use, but there are other lines of work that have received less attention. For example, Charles Lee Clark, Terry Klein, Cheryl Hicks, and Amy Friedlander (1997) studied the impact of household composition on drinking patterns. Evidence from nineteenth century households in Washington, D.C. was estimated that alcohol use increased with the number of wage earners in a particular household. It is assumed that younger people drink, more and thus, archaeologists may also be able to identify links between levels of alcohol use and the age of individuals in particular households. Household composition primarily of one might also

be expected to have higher levels of alcohol use. Religion, ethnicity, and marital status are also interesting factors that can shape material-culture patterns of alcoholism.

Archaeologists have used alcoholism help define class boundaries. However, archaeologists themselves are not immune to alcohol-based distortions. For example, Randall McGuire and Mark Walker (2009:173) pointed out that the class divisions in the archaeological professions are often couched in terms of alcohol. According to McGuire and Walker, field archaeologists, unlike supervisors, are consistently represented in stereotypical professional terms including "alcoholics."

### ***Alcohol Use and the Disruption of Old World Cultural Traditions***

The massive movement of people to new environmental and cultural settings is one of the defining features of the modern world. Historical archaeologists have observed the survival of Old World cultural traditions in new settings, including traditions involving the use of alcohol. For example, the use of alcohol-making traditions in colonial settings was probably strongly influenced by the desire to recreate Old World drinking patterns. Bitter houses in British-colonial sites in the Chesapeake probably helped meet the British colonists' demand for familiar alcoholic beverages (Carter 1998; King 1990; Moore 1990). The pursuit of Old World style beer probably also compelled German Minutemen in Salem, North Carolina to establish a brewery. In Peru, Roca and Smith (1999) argued that the Spanish colonists' desire for traditional alcoholic beverages motivated the growth of wineries in the Huapueque Valley. Similarly, Russell Shortt (1992:172) argued that wine was critical to Spanish footprints and led to Spanish colonial wine-making in Mexico. Thus, New World beer houses and wineries produced familiar alcoholic beverages that allowed colonists to recreate Old World drinking patterns.

Inter-Asian imports of European alcoholic beverages strengthened the appetite for colonial situations. Roca and Smith, for example, argued that difficulty in obtaining wine from Spain led to the rise of Spanish colonial wine-making. George Avery (1988) also noted that one of the driving forces behind the development of wine-making in Peru was the

It was one of the heaviest places to put Spanish wine in: The Mississippi Valley Indians had the demand for wine in the Spanish New World colonies and were so important that they dominated the economy of that region. In *Los Florida*, Donna Field (1997: 46) also wrote that insufficient trade and the high cost of imported agricultural products led to "agricultural experimentation", including the failed attempts at raising sugar vineyards for wine making.

Wine was a central part of the Spanish diet and consumption made. Food historians about wine in Catholic ritual may have also opened the demand for wine in Spanish colonies. The similar and varied need for wine probably explains why olive pits, frequently used for the transport of wine, were the most common European remains found at the archaeological Las Cuevas in Apolohon (Florida (Hullman 1999: 98). John Canella (1992: 63–64) examined the purchasing patterns of Spanish consumers using early nineteenth century shopping records from American and Spanish traders. A comparison of purchases revealed that religious items, including sacramental wine, were typically purchased from Spanish shops. However, as a result of cost, consumers usually spent more on "blending alcohol" from the American traders. Although Spanish and Spanish-Creole may have preferred wine, Indian peasants in Spanish colonies often purchased their own traditions of alcohol use. For example, Bernard Fontana (1981: 83) argued that the limited number of alcohol bottles visible in San Juan, Mexico reflected the traditional practice of drinking locally made distilled beverages such as pulque, mescal, and agave, from traditional bins and wooden containers.

Irish immigrants to North America also maintained Old World drinking patterns. According to Rebecca Yarus (1998: 76), glass and stoneware bottles indicated beer, ale, and whiskey drinking among Irish immigrants in nineteenth-century New York. Decorated clay tobacco pipes and the discovery of a temperance cup bearing the image of Irish Temperance reformer Theobald Mathew supported their claims of Irish traditions (Barham and Reighns 1999). Old World traditions of alcohol use were also

documented in Jewish synagogue rates of First Death. According to Yoniss, alcohol-related incidents demonstrated that

There was always plenty of wine at the Goldberg table, perhaps for the traditional blessings that were part of the Jewish Friday night supper. (Drunk Jews watching members and King players) it reminded the family of its Jewish roots and honored the request of the otherwise shy husband.

(Yoniss 1998: 74)

In 1983, Edward Shuch (1983) made a methodological addition to research from cultural traditions shaped faith and Jewish American drinking patterns in New York. Shuch drew on sociological studies that compared Irish and Jewish American drinking patterns (see also Keller 1978 for a good review of this comparative research). Although ethnicity was influential, Shuch argued that individual households characterized by social heterogeneity, in which, for example, a husband and wife held dissimilar social positions, experienced higher rates of alcohol use because of the stress that resulted from intergenerational conflict.

At seventeenth and early eighteenth-century sites in New Amsterdam, John Jacobowitz (1982) examined the role of alcohol in Dutch foodways. Jacobowitz described a number of Dutch colonial homes specifically designed for beverage storage and consumption. Traditions of alcohol use also shaped material culture in the English colonies. For example, Yoniss (1998) noted that, in contrast to new beverages such as coffee and tea, the long history of alcohol use in England meant new trends in drink drinking would have been somewhat familiar to English colonists in the Americas. According to Yoniss, this familiarity with alcoholic beverages helped speed the spread of drink drinking and associated customs equipment in the English colonies. John Walther (1991, 1992) examined French colonial drinking in Fort Mardyck, Louisiana, Michigan and at French colonial sites in Illinois. Walther (1991, 1992) believed that the small number of beverages and liquor drinking vessels recovered from eighteenth-century French colonial sites in Illinois 'likely reflect the lack of development of formal traditions of beverage consumption among the eighteenth-century French.' Despite restrictions on alcohol use in Northern Michigan logging camps in the early nineteenth century, little glass evidence indicated that Slovians

workers were allowed to enjoy free rations of beer drinking (Ferguson 1992:64). Bottle glass evidence also shows that imported British vodka was probably the primary alcoholic drink consumed by eighteenth century Kikwira for trade in Africa (Crowell 2009:133).

Chinese immigrants in North America also tried to maintain traditional drinking customs. According to Maynard, Nien (1992:45), documentary evidence indicated that Chinese elites (*jiaozhi*), which are common on Chinese American sites, were similar to those of Federal governments, which included strict laws of alcohol. Michael David Jacoby, Waters, and J. Homer Thiel (1994) found evidence of alcohol use at late nineteenth century Chinese migrant sites in Tucson, Arizona. Among the artifacts were Chinese liquor containers, liquor bottles (*jiaozhi*), and (and other alcohol related vessels. According to David, Waters, and Thiel:

Most of the recovered alcoholic beverage bottles had a construction of in Europe and the United States. These beverages probably served as replacement for Chinese liquors, which were probably more expensive, and consumed only on important occasions. Presumably not by comparison satisfaction in China helped recall memories of home areas in China.

(David, Waters, and Thiel 1994:38-39)

Archaeologists have also examined the survival of West African drinking traditions among slaves in the Americas. For example, Ferguson (1992:296) argued that when bottles found on slave sites did not contain wine or, for that matter, for the storage of other beverages like milk, water, and other alcoholic drinks. According to Ferguson (1992:302), Africans slaves used glass bottles to replace traditional African storage vessels. Ferguson also noted (1992:308) that, in some regions, slaves used gourds in lieu of bottles and that, the low number of bottles on some slave sites may reflect the fact that gourds, which do not survive well in the archaeological record, met the need for bottles. In one of Ferguson's (1992:140-142) most provocative interviews with Bay bottles, as an historical familiar with West African crafts. Such a initial response to rubber bands was that they would have been appropriate to West Africa because were overexpensive. Otto discovered a high concentration of beads associated with slave quarters sites at Curran's Point plantation

George and argued how he reflected the maintenance of West African drinking traditions in the Americas. Yet, if, as Miller believed, bowls were traditionally used for palm wine consumption, then the heavy consumption of bowls in Canada's Prairie may not exclusively reflect evidence of West African eating behaviour, as Otto argued, but also the maintenance of West African drinking traditions. Using evidence from nineteenth-century slave registers in the Bahamas, Farnsworth (2002) made similar observations about the slaves' demand for beer. According to Farnsworth, bowls recovered from slave quarters highlighted the European slave drink to various traditional West African drinking patterns.

African slaves absorbed access to European and American alcoholic beverages. For example, Barbara Heath (1991a, 1997) developed evidence that poverty, plantation mistreatment and physical punishment influenced the slaves' consumer choices. Using archaeological evidence and slave accounts from a eighteenth-century Virginia, Heath argued that slaves were active consumers who created their material world. Their consumer choices frequently included purchases of alcoholic beverages.

Alcohol has a transformative quality and a ability to alter the mind and body has led to the rich body of alcohol based rituals surrounding death and spirituality. Many cultures recognise links between alcohol and death and use alcoholic beverages to facilitate communication with ancestral and spiritual worlds. Archaeologists have explored the connection between alcohol and spirituality. For example, archaeological excavations of the eighteenth century Harney slave cemetery in Massachusetts revealed evidence of the ritual use of alcohol as slave funerary rites (Watson 1987, 1991, 1994). According to David Watson, a "The liquor-Balms of life" bottle recovered from the cemetery may have contained rum and been a grave good buried with one of the deceased. Although a number of historical documents refer to the placement of alcoholic beverages in the graves of deceased slaves, the Harney cemetery represents the strongest archaeological evidence of such practices (see Edwards 1976, Headley and Lange 1976, Hughes 1986). In the early 1870s, James Headley and Frederick Lange (1876) excavated 92 burials of Newton plantation, Barbados,

They discussed historical evidence of placing bottles of alcohol in the graves of the deceased, but mentioned no bottles with any of the humans. Green glass wine bottle fragments were also recovered from a burial in an unmarked eighteenth century street cemetery in Bridgetown, Barbados. However, the fragmentary nature of the glass suggested it related the burial accidentally and not as grave goods (Smith 1996a). Despite documentary evidence to the contrary, the lack of alcohol bottles recovered from slave burials indicates that the demand for bottles among the living outweighed the need for bottles as grave offerings. Thus, bottles were prized for practical purposes and slaves probably modified West African traditions to meet local conditions. Thus, slaves may have specified alcohol over the graves of their deceased rather than ethnically coded bottles.

David Barley (1993) studied the presence of beer bottles and cans on graves in the Pacific Island of Tonga. Barley accepted the basic perspective of alcoholism that alcoholism decreases slave usage of the use of beer bottles and cans on graves. Barley mentioned possible symbolic interpretations of the beer bottles and cans, but dismissed the symbolic interpretations of other anthropologists arguing that, in terms of social metaphors, Tongans defined status as association between the beer containers and their alcoholic content as primary decoration. The purpose of Barley's study was to generate secondary data to modern researchers who, in their attempt to "recover the mind," increasingly value symbolic constructions where none exist.

### **Alcohol and Health**

Alcohol is healthier bottle was a result of folk traditions. In colonial Europe, health was marketed as a preventative against the plague and gin was marketed to improve the health of Dutch sailors. Moreover, apothecaries and physicians were the primary producers and distributors of distilled spirits. DeWitt about alcohol's medicinal qualities, founded upon Galenic principles of health, helped open the way of alcohol making as the health care disease countermeasures of the colonial business.

Neal Rouse (1983 [32]) reviewed the evidence, rather than the commercial aspect of distilling as his discussion of the alcohol-based brand in the seventeenth century. Martin's Hundred was in Virginia. Settlers in the Chesapeake, unlike those in the west, making colonies in South America and east making colonies in the Caribbean, grew tobacco because the region was unsuited for producing alcoholic beverages. Corn and grain could have been distilled. It is corn- and grain-based alcoholic beverages were problematic because they were staples of the colonists' diets and distilling them caused food prices. The lack of abundant fermentable base materials in the Chesapeake may support Neal Rouse's contention that the production of medicine was the primary function of the Martin's Hundred distiller.

Evidence for alcohol use in other colonies also shows the persistence of Old World folk beliefs about alcohol's healing qualities. For example, Caroline Corley (1983) found liquor bottles associated with a physician's quarters at an early seventeenth century Barbados Bay Company fort in Washington. According to Corley, the presence of liquor bottles outside the medicine of alcohol's inclusion in the fort suggested that medical treatment extended beyond the area of medical surgery. Jon Wallen (1984) identified distilleries used for white leather dyestuffs, paper, including evidence that paper was occasionally ground up and mixed with wine as a remedy for "in flux, or easy" (ibid. 1990: 2150) argued that biochemical research shows evidence of alcohol production, including evidence of continuous behaviors that link sources of health with alcoholic beverages.

Patients declared improved well-being between alcohol and health in the seventeenth and early nineteenth centuries. Highly alcoholized medicines became popular home remedies. Michael Tykeson et al. (2000) conducted biochemical tests on an unlabeled 17th century bottle of Lach's Elixer, which revealed that the alcohol content was nearly 50%. Further research identified some varieties of bottles with alcohol contents as high as 40%. James (1981) studied "essence of pepperment" bottles, a popular patent medicine, which contained pepperment oil and high concentrations of alcohol. Edward Leach (1977) found large



concentrations of patent medicines located associated with the halfway house network of lifeboats at Cape Cod, Massachusetts. Laura Wilkin (1997-98) described patent medicine bottles from an African American use in Alabama, which may have been used by enslaved. Wilkin also argued that the presence of whiskey bottles in African American sites sometimes reflected the production of domestic liquor.

Evidence in the mid nineteenth century towards century Weyman African Methodist Episcopal (A.M.E.) Churches in Birmingham, Illinois revealed more evidence about the role of legally distributed patent medicines in the African American community. According to Johnson, Catell, Black, Green, and Scott Wagers (1995), providing health care to the congregation was one of the main functions of the Weyman A.M.E. Church. Glass medicine bottles represented about 10% of the total artifact assemblage. However, other health related finds showed that patent medicines were not as widely used as prescription medicines. Although Catell, Green, and Wagers discuss patent medicines as providing "little medical value" they argued that patent medicines were used to treat the congregation for a number of specific ailments.

Archaeologists have also linked alcohol to health and medicinal practices in nineteenth century. Bruce Cline (1999-2000) discussed how the miserable bottle system, which was usually part of a larger urban disposal policy, provided economic opportunities for the urban poor in nineteenth century Washington D.C. According to Cline, understanding the links between the miserable bottle system and health is what research helps explain the formation of archaeological deposits in nineteenth century urban sites. Similarly, Lisa Ann De Cenzo (1995) examined evidence of a response to the use of the triphalen society epidemic Philadelphia, which largely brewed "unsterilized, usually warm, sweetened, especially prurient." After 1818, unsterilized became a main facet of the society. Although a small number of alcohol bottles was recovered from the site, De Cenzo believed they were probably accepted and used for non-alcoholic concoctions such as "cups, spring and soda waters, and medicinal concoctions." When compared with

assemblages from graves at the seventeenth Philadelphia neighborhood, the Mayfield assemblage (colonial/early nineteenth) was not so unique. Only a few assemblages also possessed evidence of substantial alcohol use, including that of Mayfield. Beverly prominent Bishop/William White, the Carter (1805-14-88) argued that the widespread practice of bottle reuse and reuse, as well as, the impact of such removal services, complicated interpretation of alcohol use in Philadelphia. According to De Caux, the bottle evidence from the assemblage probably reflects the pursuit of a temperate ideology while the evidence from the graves of neighboring households probably reflects a range of attitudes about drink, which were affected by bottle recycling, reuse, and disposal practices.

The behavioral effects of alcohol are also evident in the archaeological record. James Hamlin et al. (1984) found evidence of lead toxicity among seventeenth-century Dutch remains of slaves buried in the Newlin slave cemetery in Barbours. According to Hamlin et al., slaves were frequently exposed to lead, but the particular cause of lead toxicity may have been the consumption not-consumed by lead in the drinking process.

Archaeological evidence has also been used to explain alcoholism. For example, in 1991, Sanks set out to investigate how the frequency of bottles at archaeological sites might increase our understanding of alcohol addiction and provide new insights that could contribute "to the interpretation of the current human condition." Using modern material culture evidence from the Tucson Arizona Garbage Project, Sanks compared the drinking patterns of Anglo- and Mexican-Americans. Sanks found no significant difference in levels of alcohol consumption (particularly households based on income or ethnicity). Instead, Sanks believed that individual choice, or maybe more accurately addiction, rather than social factors, determined excessive drinking. The results led Sanks (1991: 130-131) to conclude "temperance programs therefore on the individual are more useful than social reforms aimed at reducing drinking alcohol-related problems." Treatment of alcoholism is also evident in the archaeological record. For example, James Gorman and

Paul Hooton (1995: 122) argued that the temperance policy of the nineteenth century Southland Towns Plan (poor houses) in Rhode Island explains the low number of arrests made associated with "lower forms of alcohol consumption, *cider, punch, beer, and ale*." *Alcohol, Gender, and Anthropology*

In 1945, Donald Horton (1945) systematically examined the impact of society on levels of alcohol use. Horton focused specifically on variation caused by the lack of stable local resources in hunter-gathering societies. However, underlying Horton's argument was the notion that regardless to the circumstances, humans have levels of alcohol use. While there are numerous causes of individual anxiety, Horton focused on the level of the social group. Since Horton's initial study, anthropologists and historians have identified the tendency that lead to excessive drinking as a number of sources:

Archaeologists have also explored the relationship between anxiety and excessive drinking. For example, Klaus Kent (1983) linked anxiety and excessive alcohol use in late hunter-gatherer/Neolithic hunter-cultures. According to Kent, the late hunter-gatherer (Neopop)'s increasing interactions with European Americans led to a rapid shift from a "traditional" to a "semi-traditional" society which created anxiety and culture stress. Kent wrote,

the systematic distribution of drinking bottles found at the site . . . may, in fact, be a reflection of a group of people caught between two cultures and belonging to neither. Alcohol often provides a temporary escape from the painful alienation caused by a decreasing faith in traditional culture and an increasing confidence concerning another, nontraditional, culture.

(Kent 1983: 62)

Other examples of anxiety-based drinking are less explicit. Evidence of excessive alcohol use is especially strong drinking rules and may reflect the anxieties caused by the unpredictable nature of warlike and tribal life about the ongoing weakening effects of drinking (Carstairs 1979). For example, Smith (1977) examined drinking patterns at the Revolutionary War period on Fort Mifflin, South Carolina. According to Smith (1977: 155-162, 170), the heavy concentrations of water bottle glass revealed unique drinking pattern for military units and helped confirm the hypothesis that "soldiers drank, a lot." David Cohen Crow and Deborah Waltham (1992: 18) identified the reemerging of alcohol

among soldiers stationed in New Mexico in the 1830s. Archaeological evidence from barracks at Johnson's Mill in prison. Other evidence that housed Confederate prisoners of war revealed an unequal distribution of liquor bottles in different barracks. According to David Black (2000:74) liquor bottles were concentrated in the barracks of groups of prisoners who were willing to take on such of allegiance to the Federal government. These Confederate soldiers received "special treatment," including access to alcoholic beverages.

Archaeologists frequently lump alcoholic beverages under the functional heading of "intemperance" (Closs 1999). An archaeological study of Fort Snelling, Minnesota used artifact concentrations to identify the spatial layout of the fort, including salaried areas specifically associated by military officials for alcohol use (Closs 1999: 103-104). Robert Closs (1999) found that alcohol use dominated certain areas within Fort Snelling. The evidence highlighted a military subculture that embraced "mechanisms of escape from the rigidity and rigors of military life." According to Closs, this pattern of requests (alcohol) areas indicates to operate as modern U.S. military barracks and "may in part be responsible for the ability of the military structure to survive in a culture where individualism is an essential part of social definition by providing an escape mechanism from the military structure of severity and inequality."

The rank and marital status of soldiers helped shape patterns of alcohol use at military sites. For example, at the nineteenth century site of Fort Independence in Illinois, Joyce Chismale (1991:17) discovered a relatively high percentage of wine and liquor bottles in areas associated with single commissioned officers. Bottle glass evidence indicated that single commissioned officers drank more than their married and non-commissioned counterparts. However, at the mid nineteenth century site of Fort Illinois in New Illinois, Janda (1992) found little evidence in bottle glass assemblages between officers' quarters and enlisted barracks.

Continued hard work, and exposure to the natural environment increased soldiers' ability help explain the widespread use of alcohol by soldiers at the frontier margins of

the colonial Atlantic world. Trouwman identifies also numerous bottles of alcoholic drink, therefore, help explain evidence of drinking at sites associated with various social groups. For example, *Beetle House* (1964) argued that the large number of wine glasses recovered from Fort Royal confirmed documentary reports about heavy drinking and the debauched lifestyle of Fort Royal inhabitants, many of whom were women. John Fineman (1992: 84) occasionally studied wine-drinking workers at Northern Michigan logging camps in the early twentieth century. John Tuckman (1976) examined embossed bottles from nineteenth-century western mining towns, which revealed the wide variety of alcoholic beverages available to western miners. Leachman might explain the numerous whiskey bottles found at Ticonderoga House sites associated with Miners who lived along the coastal shores of Cape Cod, Massachusetts (Leach, 1972). Anthony Stathos (1981: 8) argued that archaeologists can recognize seasonal work and hunting camps in the Yucatan by the 'large heaps of discarded prickles and needles'. A liquor store was noted in the nineteenth-century Hudson Bay Company's Upper Fort Garry in Manitoba. According to Gregory Marks (1992: 45) in 1871, the fort walls were shared and the liquor store made more easily accessible to nearby frontier settlers. Archaeology may also explain the heavy drinking sometimes attributed to archaeologists. Excessive drinking may have results of the routine and transient lifestyle of Bahian/Caribbean, which entails a variety of unpredictable employment.

There is some evidence that temperance clubs penetrated the frontier frontier. For example, according to George Tappan (1905) the growth of temperance among western miners in the late nineteenth and early twentieth century. Railroad mining site is revealed as the decreasing number of alcoholic beverage bottles at the site between 1880-1920. Tappan argued the shift reflected the influence of middle class Victorian clubs on the frontier miners. Fineman (1992: 84) also noted that, in Northern Michigan logging camps, Plains formed temperance organizations in order to strengthen class and ethnic solidarity.

But temperance based alcohol-store was limited to the military and frontier towns. The presence of alcohol bottles at place sites can also have been used as a way to escape the

many varieties of porous ceramics within the confines of a personal labor system. The intense mobilization ability engendered in emerging industrial societies may help explain the need for alcohol at corporate-run boardinghouses, such as those at the Great Ocean Mills in Lowell, Massachusetts.

### *Model: Material Facts and Technological Method*

The production, distribution, and consumption of alcoholic beverages are specialized activities that have given birth to distinct subcultures of material culture, including the material culture of alcohol as often well-evident due to the long-standing and current use of glass bottles, crystal wine glasses, and various drinking cups. Recent emphasis, for example, upon the preference for the modern aluminum beer mug. Prehistoric excavation, period paintings, museum collections, and archaeological discovery have helped archaeologists identify the more complex material culture aspects of alcohol. In nineteenth century America helped Noel-Hume (1994: 102) identify the late nineteenth century local and nineteenth and eighteenth century prehistoric excavations helped Boudry (1981) show a metaphorical relationship between the home for drinking vessels and their primary alcoholic functions. The material culture of alcohol has suffered to capture a variety of alcohol-related themes in the modern world, but the materials themselves have also strengthened the material archaeological methods.

Glass bottles are a valuable tool for dating archaeological deposits. Noel-Hume (1994: 107) developed a methodological dating system for nineteenth century glasslike English green glass wine bottles by correlating bottle shapes with known dates from wine bottle seals, which were occasionally attached to bottles. Noel-Hume's method was later refined through detailed analysis of bottle neck and shape changes (Noel-Hume 1976; Preece 1990). William Preece (1990) examined morphological changes in mid-nineteenth to mid-eighteenth century English green glass wine bottles and argued that they became less globular and more straight-necked over time in order to accommodate the increasingly common practice of forcing.

Isotained was bottle scale provides useful information about the provenance of particular bottles. Used in conjunction with documentary evidence, isotained was bottle scale can help archaeologists trace the movement of bottles through communities, identify the producers of particular sites, and date archaeological deposits. For example, William Kelso (1984, 109–120) compared isotained was bottle scale with both lead and date evidence in order to identify and date deposits at the King's Landing site near St. Augustine, Virginia. Bottle scale also show the reuse of bottles. Davis (1983–84) for example, recovered bottles from eighteenth century sites at Flowerden Hundred, Virginia, which possessed scale of London provenance.

The English were major producers and suppliers of green glass bottles in nineteenth century America and these bottles are common on both English and non-English colonial sites. To a lesser degree, the Dutch and French also produced was bottles, which archaeologists have also used to help date sites. In 1989, Paula Cowan published one of the most comprehensive studies on was bottles and it included information about non-English varieties (Brown 1971, Brown and Sullivan 1989, Lyons 1971) divided the metropolitan area into divisions of postal marks, which also included non-English varieties. American glass bottle making was commonplace in the seventeenth and eighteenth centuries. However, J.C. Hartogson (1971, 30–34) explored the possibility that a seventeenth century glasshouse at Jamestown, Virginia intended to produce glass bottles for Chesapeake colonies. Dating techniques have also been developed for clear was bottles (Nicol-Harbo 1976, Wilkerson 1977). Late nineteenth century bottle-making machine made beer and liquor bottles (Foxon 1966, Hall Waldo and Waldo 1966, Miller and Sullivan 1991, Walker 1994, and the beer case (Black 1981, Maxwell 1981).

Chemical analysis has been used to identify the chemical composition of materials at various sites. For example, infrared spectroscopy of deposits from green Brown age jars at the New East revealed high levels of tartrate, and a principal residue of grape was (Charles McGovern, and Michel 1999: 25–34). Such chemical methods are not always accurate for the bottles period as alcohol itself is occasionally recovered. For example, in 2000, was

remnants from Almere, Netherlands, sampled from around 1800s Dutch trading (but had reached off the coast of Holland in the early seventeenth century). The wine may have originally come from Portugal or Spain and laboratory testing showed that the alcohol content was 10.5%, similar to that of modern wine (Archaeological Process Colonization Sites, Volume 128 (42) August 27, 2000, to the 1990s). Mission Lake successfully tried to retrieve the original alcoholic remains of corked bottles recovered from underwater sites in Port Royal, Jamaica (Lark 1962). Two decades later Donald Burnham and Robert Woodward (1984:45) recovered corked wine bottles from Port Royal, which may have still preserved remnants of their original alcoholic content.

Assuming we have speculated about the original contents of green glass bottles. For example, Post Hume (1974) believed dark green glass bottles contained beer and ale while the lighter based green glass bottles contained wine. Drought related seventeenth century Dutch and English glass cask bottles are often referred to as "pin bottles" (Post Hume 1974:12). Archaeologists have used this information to derive much the drinking preferences of different racial groups. For example, deGraeve's Pinet plantation, Otto (1984:76,80) (12) measured the frequency of glass bottle shapes and colors to determine the types of alcoholic beverages consumed by slaves, seamen, and planters. However, it is especially impossible to determine the original contents of individual green glass bottles. Many bottles were simply shipped empty and filled with various liquids upon arrival at the colonies (Otto 1984:115). Parnis (1962) Jones (1991) examined different consumers, including wooden casks, earthenware jars, and glass bottles, and found that they were used to hold both alcoholic and non-alcoholic contents. Moreover, even at the market, glass bottles were manufactured recycled for a variety of alcoholic and non-alcoholic purposes. For example, Kates (1944:127) recovered several wine bottles from seventeenth century well at the Littleton site. One of the bottles was corked and still preserved remnants of its last contents, milk. Joan Frank (1987) explored seventeenth and early eighteenth century bottle recycling practices and concluded "Archaeological excavations have shown that bottles



could be kept for decades before they were discarded" (see also Foreman 1958:53, Jones 1983:28). This suggested that the number of vessels and containers in a glass bottle might give some indication of its use life. Foreman and public recycling policies encouraged bottle reuse and Beach provided details about the rise and fall of the small-scale bottle business. Cohen (2000), Hall-Walker and Walker (1994), Walker (1994), and De Cansio (1995) also addressed the impact of bottle recycling on the formation of archaeological deposits.

Spanish olive jars were often used to transport wine in the Americas and detailed studies have made them excellent chronological markers for Spanish colonial sites (Avery 1966, Douglas 1973, 1987, Grogan 1980, Jones 1983). For example, Stephen Jones (1983) studied a large sample of olive jars excavated from Spanish settlements off the coast of Santa Domingo. Although unable to find any direct correlation between the size and shape of olive jars and their contents, Jones agreed, based on the earlier work of John Grogan (1980) and Kathleen Douglas (1983), that glazed olive jars were more likely to have contained wine. Jones (1983) noted that, in such glass wine bottles, Spanish olive jars were frequently reused for olive liquids, such as water to help preserve olives or their stems to dipso. More recent analysis by George Avery (1986) has revealed a stronger connection between the size and type of olive jar and their contents. John King (1984) excavated Spanish olive jar fragments from three seventeenth-century sites in St. Augustine, Florida. King found that the use of oblong-necked containers for cooking and storage became increasingly common in the seventeenth century. At the same time, the use of Spanish olive jars for cooking and storage decreased. King attributed the increase in oblong-necked vessels, in part, to the availability of St. Augustine residents to afford wine. As a result, oblong-necked vessels replaced Spanish olive jars when access to wine, and the olive jars that carried wine, declined (see also Douglas 1983, chapter 11).

In Peru, Frederick Rice and Sara Van Driel (1985) studied the production of ceramic storage jars (*jarrajes* and *jarques*) which were used to store and transport wine produced at Icaque in the Moquegua Valley. According to Rice and Van Driel, *jarques*

and *coques* were sometimes of etched glass amphorae and reflected earlier *flasks*, *florids*, and *florals* (mediums of wine transport). As with green glass wine/bottle, dated seals were sometimes applied to the vessels. In the mid-eighteenth century, primitive large [cork]/corkation-the-ancestral-without [cork]/corks to replace ceramic *coques* and *coques* (in France 1946:25). In Canada, Ecuador (Jennison) distinguished the functional uses of *bolques* and *coques*. According to Jennison, *coques* held the wine and *bolques* were from sugar-making while *coques* were used to store the finished product... (in addition, Andean iconographically used *bolques* to store what he has (Jennison 2005:144-145).

Anthropologists have also recognized the methodological potential of ceramic drinking vessels. For example, Yankuch (1946) argued that the use of leather drinking vessels in the seventeenth century-Chicopee reflected economy with English F&B traditions (see also Brantly et al. 1940). However, in the late seventeenth century, the use of ceramic drinking vessels became more popular. According to Yankuch, the adoption of ceramic drinking vessels created a new seventeenth century still toward Redemptive state. In particular, still drinking vessels emerged in the seventeenth century in order to compete with the silver-drinking cups of the elite. Private drinking cups may have been particularly associated with seventeenth century alcohol consumption. Amy Smart Martin (1946) argued that private-drinking cups derive from Spanish making them wild and therefore, the introduction of hot drinks such as tea and coffee, led to a decline in private drinking cups in the eighteenth century. Private and symbolic-drinking pots were also popular in the seventeenth century and brought the communal and public nature of alcohol consumption (Brantly 1940). Brantly used seventeenth and eighteenth century private ceremonies to show the colonial introduction of alcoholic functions of cups and pots and, therefore, did not feel the need to argue modification, such as wine-cup or beer pot, to express their alcoholic purposes. In 1946, Noel Hume (1946:3-34) studied wine glasses from several different sites in Port Royal, Jamaica. Noel Hume established a wine glass chronology and used this information to show that Port Royal, although partially

submerged by an earthquake in 1992, remained submerged for over a millennium. However, the more glass chronology supported Noel Hume's claim that most of the technological deposits from the pre-earthquake period were not indigenous.

Dispersed evidence has also helped identify alcohol making at numerous sites. However, finds were also mostly secondary vegetation from alcoholic beverages and, therefore, they reveal indirect evidence of alcohol use at archaeological sites. For example, John D. Bort, Lawrence Kaplan, and Mary Mauck in King (1998: 67) argued that the large quantity of first year recovered from a seventeenth century perry in Boston, Massachusetts, "formed the perry as waste from the preparation of perry or the first steeped alcoholic drink such as cider, because which were popular in early American homes."

Wooden casks and barrels represent another facet of the material culture of alcohol. Lister Bow (1985) examined a seventeenth century Spanish Ganges coppering technique using evidence from the Red Bay site in Newfoundland. Although the barrels were used for whale oil, the study revealed new insights into early barrel making. In 1685, the French explorer René Robert Cavelier, Sieur de La Salle's ship, *Belle* wrecked in the Gulf of Mexico at the coast of what is today Galveston, Texas. Documentary sources indicated that tin wine casks were loaded on the *Belle* before it embarked on its last voyage. Archaeologists recovered four wooden casks from the shipwreck, indicating how they were used in field work (Kassie 1996: 80-82). Iron barrel hoops, indicating alcohol storage, have also been recovered from eighteenth century sites at Williamsburg, Virginia and at the slave cellar at Vredenburgstraat in South Africa (Machell, Hall, and Schreyer 1995: 26, Noel Hume 1998a). Even when wooden barrels are absent, other artifacts indicate their presence. For example, archaeologists have recovered wine spigots from eighteenth century Williamsburg's James and Charles's collection in Williamsburg, Virginia (Gordon et al. 2000, Noel Hume 1998b). Even (1986) also recovered wine spigots from a seventeenth century far-traveling occupation site in Wisconsin.

The material culture of alcohol was sometimes recycled in protocol, or was alcoholized again. For example, on Spanish colonial sites, Draper (1945:35) and Smith et al. (1982:151–158) found that cups, or wooden bowls, were commonly employed as wall construction. Ceramic storage jars were sometimes used as architectural elements in the Spanish Americas, especially as fill-in-eyebrow niches and arched collars (McIlwain 1992; Kol, Lester and Lester 1981). Adrian Agnew (1995:76) documented Mexican bottles at the late eighteenth and early nineteenth century domestic site of San Carlos in Portsmouth, New Hampshire. Agnew argued that the bottles reflected, not high levels of alcohol use but rather the propensity of bottles to be used and damaged around the property. In Buenos Aires, Argentina, grape stems (*vidas* – vines) were used around houses and patios for shade and, thus, ethnohistorical evidence of grape vines may indicate covering rather than wine making (Delfino et al. 2008:150).

Archaeologists have identified the production of both clear-green glass wine and liquor bottles on Native American and African slave sites. For example, projectile points, weapons, and cooking tools made from bottle glass have been found at Native American contact period sites at Jamestown, Virginia (Cotter 1958), late eighteenth century Quedavuevas Indian site in Spanish-controlled areas of Alaska (Crawell 2000:182) and early nineteenth century Lower Indian sites in Texas (Parrish 1994:70). According to Wilke (1996), introduced wine bottle glass found at slave sites at Oakley plantation in Louisiana may have been used by slaves as shavers as well as for magic rituals.

Bottles also served symbolic purposes unrelated to alcohol. For example, at late sixteenth century Aztec site, Matamoros, Matthew Reeves (1996) recovered two partially intact green glass wine bottles standing upright and adjacent to a former slave dwelling. Reeves interpreted these bottles as “drink bottles” and believed they functioned as spiritual objects associated with that religious belief system. Patricia Sandford (1996) recovered similar “winejar bottles” from slave sites in North Carolina (see also Wilke 1997:88–89). Bottle bins were also popular at African slave dwellings, where they served as spiritual and

analysis function (Thompson 1984:144-145). Thus, bottle glass fragments, African slave assemblages may reflect spatial rather than diachronic uses (Heath and Bennett 2000:40).

However, the routine use of bottles was performed in African slave sites. Matthew Johnson (1996:161-162) described "white bottles" recovered from early modern domestic sites in Britain. According to Johnson, "Many 'white bottles' of imported wine have been found, often buried underneath the hearth. These were usually made up of whiteclay." One such example was a German immigrant settlement, which contained glass or snuff and the visitor's snuff and wine.

### Conclusions

Alcohol has penetrated all societies in the modern world and it would be difficult to find an archaeological site completely devoid of its influence. The presence of every bottle—ranging in size from the pint to the gallon—has the potential to provide documentation about alcohol use. Even the absence of alcohol-related materials raises questions about the beliefs and behaviors of the site's occupants. First, if any of the archaeological studies mentioned above specifically set out to examine the role of alcohol in society. Discussions about alcohol were frequently by-products of broader research designs. As a result, many conclusions and upon essential assumptions and provide little more than broad particulars about the role of alcohol in society. Yet, these studies still have the potential to enhance our understanding of many alcohol-related themes in different cultural and historical settings. This survey is only a sample of the better known works. It is far from complete. There are numerous conference papers and site reports housed in the libraries of state historic preservation offices, museums, and universities that could provide new details on production, distribution, and consumption of alcoholic beverages.

This survey highlights the strengths and weaknesses of the archaeological study of alcohol. Alcohol researchers and public health officials have explored the relationships between biology and alcoholism, especially in Native American groups. Even though archaeological methods have the ability to address individual and site specific processes,

archaeological methods are simply not in a good position to address the relationship between biology and alcohol. Half-lives, which are the primary reason scientists drinking and might provide consistent estimates of alcoholism, do not survive in the archaeological record. The many other variables that shape alcohol in local deposits, including wealth, society, occupation, and personal belief, require analysis of biological influences. Bottle recycling practices also disrupt attempts to determine levels of alcohol consumption. However, the study of trash recovery through bone chemistry analysis may be one way to detect patterns of excessive drinking (Hendler et al. 1994). Still, one of the primary reasons why alcoholism is beyond the scope of archaeological inquiry is simply that, despite recent breakthroughs in bio-archaeological research, the connection between the alcoholism and biology is poorly understood and complicated and will highly questionable (Flood 2000: 14; Hendler and Howland 1973: 53–59; MacKinnon and Ferguson 1999: ch. 1; Marshall 1998: 4–15).

Our lack of knowledge about the original contents of bottles is also a major shortcoming. Although Noel Holmgren and others speculated about the original contents of green glass beer and liquor bottles, the widespread use of bottles for various chemicals and non-alcoholic liquids prevents a clear understanding of how bottles were, through chemistry. This information could provide valuable information about consumption patterns and other indicators of local trade.

One of the most disturbing discoveries has been that temperance ideas still shape the direction of archaeological inquiry. For example, many of the studies on working-class and Irish immigrants were designed to document levels of alcohol use without the constraint of (Jaggis 1990; MacKinnon, Renshaw, and Renshaw 1998; Redman and Beggs 1999). Highlighting the suppression of alcohol-related evidence and the need to qualify statements about immigrant working-class drinking are Victorian middle-class notions that denigrate alcohol use. Rather than interpret alcoholism among the Irish working class as the persistence of cultural traditions, concerned to middle-class values, or

as context responses to post-living and working conditions, these studies highlight both working class temperance. The emphasis on temperance is motivated by workers' beliefs that excessive wine alcohol use strongly affects moral behavior.

Archaeological methods have been much more successful at explaining alcohol-related issues of anxiety, variability, and identity. Based on Hirston's theory, the primary function of drinking seems to be the induction of a social group's anxiety. Archaeologists emphasize on the identifying the function of particular uses and their relationships provides a good foundation for exploring the anxiety-reducing function of alcohol. Unlike social groups experienced greater degrees of anxiety and risk consciousness may reveal different alcohol's responses to stress. Drinking might be expected to be more widespread at military sites and sites occupied by transient groups. Alcohol is also a social lubricant that reduces variability. Archaeologists have successfully explained the structure and material culture of alcohol-based variability, which has allowed archaeologists to interpret variability as different functional and related contexts. In addition, taverns, saloons, and other male-oriented drinking establishments should help us understand the very drinking-related uses and their material world help construct masculine identity. Finally, archaeological evidence can reveal how patterns of alcohol use distinguish social groups and economic classes. The typical drink consumed, the preparation of alcoholic drinks, and the contexts in which they were consumed help define group boundaries.

Archaeological excavations of a mid- to late nineteenth-century domestic site in Bridgwater, Somerset provide a new opportunity to explore the anxiety-reducing, variability-reducing, and group-defining function of alcohol. The archaeological model developed in the subsequent chapters sheds light on these functional aspects of alcohol in the British colonial world.

CHAPTER 11  
BACKGROUND TO ARCHAEOLOGICAL EXCAVATIONS AT A SEVENTEENTH  
CENTURY DOMESTIC SITE IN BRIDGETOWN, BARBADOES

Historical archaeology has a long tradition in the Caribbean, including research on colonial towns. Archaeologists have conducted extensive excavations in Spanish colonial town sites in La Isabela and Cienfuegos de la Vega in the Dominican Republic, La Navidad and Puerto Real in Haiti, San Juan and Caparra in Puerto Rico, Sanluis Potosí, Havana, Havana, Cuba, and Nueva Colón, Venezuela (see Drayton 1985 for a compilation overview of archaeology in Spanish Caribbean towns). In the Dutch Caribbean, Norman Endes and her students have mapped the historic town sites of Oranjestad, St. Eustatius (Berka 1988: 199). Dordrecht, Groningen, Middelburg, Roeka 1982) and Philipsburg, St. Maarten. Archaeological studies have also been conducted in Willemstad, Curaçao (Blaauw and Bouwman 1996: 251). Although a strong tradition of French archaeology exists in the Caribbean – no French Caribbean town sites have been excavated leaving a significant gap in our understanding of complex colonialism and making this an excellent subject for future study (Pohl-Royall, 1996), a rise that gained international attention in the 1980s has been the only major archaeological research project in the French Caribbean to achieve academic (Rasmussen 1986; Hamilton and Woodward 1984; Link 1985; Marc 1973; Molyer 1972; Noel 1986: 1982).

Archaeological excavations in the historic port city and capital of Bridgetown, Barbados represent only the second colonial town site studied in the British Caribbean and the first in the British Lesser Antilles. These excavations provide new opportunities to explore the cultural and historical development of the British Caribbean, increase our understanding of the role of Bridgetown within the Atlantic world, examine the dynamics of social life in urban port towns, and compare British colonial towns in the Americas. The



information reported from Bridgetown will also complement the more extensive archaeological studies on Caribbean slavery and plantation life.

Barbados is the westernmost island in the Lesser Antilles chain. It is primarily a coral island, which was formed by tectonic uplift and reef building during successive geologic phases of warming and cooling. The island consists of a series of terraced coral capped plateaus cut by river valleys. It is about 166 square miles in total area.

In the southeast corner of the Barbados is a large well-protected bay. Early English colonists named it *Caroline Bay* in honor of Queen Anne's first daughter, the third and original princess and sponsor of the first permanent English settlement. In the mid-seventeenth century, English colonists Richard Lugan (1657-28) referred to Caroline Bay as "the best in the island." Prior to English settlement, the coastal area around Caroline Bay consisted of beach and dune marine deposits and was covered with mangroves and other sub-tropical trees and shrubs (Dawson 1891: 4-5, Watts 1987: 23). The western edge of Caroline Bay was only the island's *chaparral* zone, but the area was more or less a swampy "bay or Morass" most of the year (Lugan 1657: 23). This swamp became the future capital city of Bridgetown.

Africanization was the first colonization of Barbados. In what may be considered early archaeology, colonial settlers occasionally collected, described and described African slave pottery and tools and speculated about the origins of the post-slave peoples of Barbados. For example, Lugan wrote,

In Statute Making of the Inward Islands, that were in a distance of six, seven, eight or ten Canoes, and Portuguese (perhaps in the original) and finding such Canoe in boats, as these large (left by the Portuguese in the sixteenth century) and the flesh in water and excellent in food, they came off to Dublin, thinking, and they themselves a month together and in returned again at pleasure, leaving behind them various tokens of their being there, which were First, of several ways in which they boiled their meat, made of clay, or fleshy composed, and spread with soft oil, and last some were very like them. For these of quality and richness of having, in England.

(Lugan 1657: 23)

Caribbean invention and physician Sir Hans Sloane (1787: LXXI) noted that the quality of the prehistoric Amerindian pottery was so good that it was sometimes reused and recycled by Arawakan slaves brought to Barbados later in the seventeenth century. In 1790, Barbadian sugar planter Griffith Hughes made detailed sketches of Amerindian pottery and tools and speculated about the Indians' disappearance in the name of English settlement. Hughes (1790: 5-6) believed that they fled to the nearby island of St. Vincent.

Other islands in the Lesser Antilles had earlier age settlements dating to 3000-800 BC, but there is no conclusive evidence of prehistoric Amerindians in Barbados (Bosman 1987, Doreen 1981: 11; Rouse 1982: 10). Steven Hackenberg (1983) obtained radiocarbon dates of 225 BC from one possible site, but the evidence was not found in association with cultural material such, therefore, considered questionable (Doreen 1991: 13-14). The first Amerindians in Barbados probably migrated from the Orinoco River Valley of South America and arrived about 350 AD (Bosman 1987: 11; Doreen 1991: 13). Peter Doreen (1991) and Ann Bosman (1997) argued that Salishoid cultures were the first inhabitants of Barbados. Bosman specifically identified this Salishoid tradition as the later Trinomian subculture. The Trinomian cultural tradition followed the Salishoid phase. Trinomian peoples represent a local development rather than the migration of a new cultural group (Doreen 1991: 11; Rouse 1992: 127). According to Rouse (1992: 127-128) the Salishoid 'merged into Trinomian between 500 and 800 AD' In Barbados, this transition appears to have occurred later, sometime around 650 AD (Bosman 1997: 21-26; Doreen 1991: 11). The final phase of Barbados, prehistory began around 1000 AD. The second cultural tradition evolved from the Trinomian and was probably not the result of some sort of migration. Clark Indiana explains that last stage of prehistoric development in the Lesser Antilles: 'It is not clear whether the Amerindians in Barbados in the time of European exploration and settlement were the same people that Europeans called "Carib" or whether they were the ancestors of Siquané culture' (Adams 1994: 961; Bosman 1997, Bullen and Bullen 1996a, 1996b; Carr and Goodwin 1990: 42).

In the seventeenth century, the river at the southern end of Barbados was called Indian River because of "numerous Indian whom found about its mouth" (Washington 1758: 11). We recovered more than 1,000 shards of Amerindian pottery and numerous shell tools during our excavations at Barbados, Barbados, Trementon, and Demond. Amerindian pottery types were all represented indicating that the prehistoric peoples of Barbados had exploited the mangrove swamps, river, and salt bay for centuries before the arrival of Europeans and the enslavement of the Taino.

### European Exploration and Settlement of Barbados

European contact with Barbados began in the early sixteenth century. Spain never visited the island and used it only to procure slaves for its plantations in Hispaniola. In the early sixteenth century, Spanish and Portuguese sea captains left ships on the island for use as bases of shipwreck. The ships became fixed and so profitable that they had long helped sustain the early English settlement nearly a century later.

In 1627, the first English colonists arrived at Barbados. The original settlement was a syndicate sponsored by London merchant William Courteen. Two dozens of colonists landed on the west coast and began farming. However, it is not clear if Courteen actually had a Royal patent for the settlement. At about the same time, Lord James Hay, the first Earl of Carlisle was given a Royal patent, which related proprietary rights to Barbados. In 1628, Carlisle also sponsored settlers who established separate farms and a village near what was to become Bridgetown (Campbell 1996; Davies 1997). English officials also inadvertently gave proprietary rights to the Earl of Pembroke. The confusion over proprietary rights to Barbados highlights English officials' early lack of interest in the island. In 1629 after legal battles, court petitions, and violent clashes between proprietary settlements, Carlisle won clear proprietary rights to Barbados.

Caribs invaded the Barbados in the early English colonial period. For example, in the late 1640s, Legue wrote that Amerindians from the island of St. Vincent visited Barbados to fish and trade. As late as 1750, Haysler made similar observations. Early

colonists they imported to the nearby islands and South American mainland and brought back Caribs, who caught fish for the settlers and helped them adapt to their new environment (Wheatley 1969: 1970; Lagoon 1871: 29–32). Caribs taught the English how to grow local produce crops, like local staples, and produce alcohol from potato and bananas.

The English colonists also needed laborers for their farms. The legendary story of John and Thomas took place in Barbados in the 1640s and provides some insight into the early migration between the Caribs and English. John was an English settler and remained on a venture from Barbados to the South American mainland. He and his shipmates went on shore to explore, but, when a Spanish galleon attacked their ship, John was separated from his mates, injured, tired, and hungry. John was found by Thomas, a young Indian woman. She nursed him back to health, fed him from her family's kitchen, and helped him return to his crew. After saving her life, John brought Thomas back to Barbados where he then sold her into slavery (Lagoon 1857: 14–15). However, not all Caribs met with such an unfortunate fate. In the 1630s, Salomonages, a Carib fisherman, became one of the largest property owners on the island (Campbell 1995: 146–147). Thomas, a Carib domestic servant owned by Reverend Samuel Parris, an English merchant in Bridgetown, found Parris an early American history to the first "black school in the town of Salem, Massachusetts. In 1640, Parris brought Thomas to Salem where she taught a group of young girls the art of Caribbian magic, which became the central spirit of the Salem witch trials (Bensline 1998).

Barbados acquired a reputation as a wild frontier and many frontier communities the drunkenness and debauchery found among the island's colonists. One hapless visitor wrote: "This island is the dunghill where (England) doth cast forth its rubbish, Beggars, and slaves and such like people as there which are generally brought here" (Wheatley 1654: 132). Reporting on life in Barbados in the late seventeenth century, South Carolina Governor Joseph West (Johnston Bradenbaugh 1971: 503) wrote, "We had the use of our servants was brought out of England a reflection of the Barbadians, for they are so addicted to run, that they will do little but whilst a term is their own." The Barbadian

is usually was forced to pass legislation through by brute voting, drinkmaking, whoring and other "vicious and ungodly means" on the Barbados (Parkerborough 1992: 211). Other visitors had a better impression of the island. Ligon (1657: 20–22–23) thought Barbados "brutish" and described the island's life as "loving, friendly and hospitable one to another" and though they are of "various persuasions yet, their disputes contented everything as well as they were from any killings out between them."

During the first twenty years of settlement, colonists produced tobacco using Caribb, indentured European labor, and a small number of African slaves. However Barbados tobacco had a poor reputation and could not compete with the higher quality weed grown in the Chesapeake. Cotton-experimented well cotton and linen, radish, and although another crop was very successful these ventures helped sustain Barbados in its early settlement years. The records from 1633 indicate that the adult population was 1,237, but, by 1640, Barbados had about 10,000 inhabitants (Jones 1992: 28–34).

Despite the early economic difficulties, the emergence of sugar making in the 1640s and 50s made Barbados the wealthiest and most populous English colony in the Americas. Historian Eric Williams (1944: 24–25) argued that seventeenth century "Barbados was more akin to Puritan capitalism than New England, New York, and Pennsylvania combined." Sugar production transformed Barbados into the first large-scale slave society in-Caribbean. In 1628 there were 20,000 African slaves in Barbados and they represented less than half of the island's population. In 1675, as a result of the continuing expansion of sugar making, and subsequent expansion in the demand for labor, the number of African slaves reached 23,184 and they represented 61 % of the island's population. Barbadian planters developed a harsh and efficient system of plantation slavery that became a model for later Caribbean colonies, especially in Jamaica. As a result of the sugar trade boom, the small village of Bridgetown grew into a booming international center. Bridgetown served as the doorway for a huge wealth of imports and exports that fueled the Atlantic economy

## The Bridge

Many of the first English settlers lived in the small village of Bridgewater on picturesque small farms along the outer waters of the great coast. "The Bridge" as the town was customarily known, was named for an Indian bridge that, in the early years of settlement, stretched across a point near where the sea and the town's only river, Abolishing, in English.

Thus we reliably confirmed by the burning and bounding of several measurements near the bay, which, on very old deeds, are said to be situated in or within certain distance from the Indian Bridge, being which the great number of houses built about this convenient place, came more afterwards to be called Bridgewater. The above mentioned bridge was placed upon that part of the creek, or narrow neck of the bay, which divides Mr. Galsworthy (Clark) a house from Colonel John Pemberton's. The economy that the natives, residing on the North side of the Creek, were under to make a bridge (which is all that is left of it) consisted of no more than a few poles, laid a down, and laid across the creek, and appear when we consider that there is, and that the only supply of that wood was on the South side of it, in a place now called Hattergill's Spring.

(Hughes 1758:6-7)

Apparently, residents continued to use the original Indian bridge until 1848 when the Indianos Assembly collected revenues for the purpose of rebuilding it (Abbey et 1976:38).

As was typical of early master accounts of the New World, the choice for Bridgewater's location was derived. For example, Ligon considered Bridgewater "calculated well-chosen" due to swampy location. Surviving in the desolate environment of Barbados was a challenge for English settlers and, in 1647, an epidemic, likely yellow fever, spread across Barbados and was thought to have killed between 4,000-10,000 whites and many blacks (John Watts 1987:213-216). Bridgewater's residents were especially hard hit. According to Ligon (1687:25), residents of Bridgewater were dying so fast that the bodies of many of those who had succumbed to the illness were simply tossed under trees' canopy. Although Bridgewater was considered unhealthy, the settlement was located on a large well-protected bay ideal for trading ships. By the mid-seventeenth century, two fortifications had been constructed at the entrance to Caribbe Bay.

The rapid growth of Bridgewater and shortage of good urban planning meant that the small village of Bridgewater grew as an unplanned and disorganized market. Its spaces

had no post office system like the entirely Spanish colonial letters. There was there a European organizational style for the town under which located in the seventeenth century English settlements of St. Mary's City, Maryland (Miller 1991). In Bridgetown, urbanism and workhouses quickly spring up near the harbor to meet the growing demands of the sugar trade. Colonists also set aside an area off Charles Bay as a site for the increasing number of European trading ships.

Large government houses, established by the late seventeenth century, the "disturbed" village had become a wealthy and beautiful example. Many began to admire Bridgetown's beauty. For example, in 1700, visiting French missionary Father Jean Baptiste Labat wrote,

The town is fine and agreeable, its streets are straight, long, clean, and well frequented. The houses are well built in the English style with many glass windows, they are magnificently furnished. The shops and the numerous workhouses are filled with all one could wish from all parts of the world. There are a number of public schools, gardens, churches and other edifices which draw a flowing trade and appear to be very comfortably off, and the largest business in "America" is carried on at this time.

(Labat 1978:125)

By the end of seventeenth century, Bridgetown housed a hospital, churches, and numerous shops. Barbados map have had as many as 1 tavern per every 20 residents (Allfrey 1978:12). The town also had a jail, schools, military wharfing post, and docking post for animals, as well as runaway slave refuges. Bridgetown's principal church, St. Michael's, had a clock tower with chimes. The population of Bridgetown in 1688 was about 1,000, about half of whom were slaves (Dunn 1993:197:198). In the period Bridgetown was larger than any British town in North America except for Boston, the main port for all of New England, which had a population of about 4,500. In contrast, the colonial capital of New Orleans, La Nouvelle Orleans had more than 100 permanent residents in the seventeenth century. Owing to the suppression of slavery map have been forgotten on the minds of many British colonists on the American frontier and, at the seventeenth century, residents of Bridgetown successfully built a sophisticated urban center (Bridges 1990:96-97; Douglas, Chappell, and Graham 1990; Deedsborough 1955:26; Deedsborough 1968).

In the mid-seventeenth century, Bridgetown had one main thoroughfare named *Chapinwa*, which paralleled the north side of the harbour, and from it a network radiated of narrow streets and alleys. Tax records from 1685–1713 indicate that Bridgetown had 15 primary streets and alleys north of the river and a modified neighbourhood off to one side, inland, and southward in the south. Bridgetown was mainly driven by its large Jewish community, which concentrated on Swan's Street and a Quaker meeting house on Tucker Street. Bridgetown was a major trading centre consisting of prominent merchant houses, such as the Royal African Company located in James Street. One of the more interesting individuals listed in the tax records was the infamous pirate Jack Bonnet who, in the early eighteenth-century, was responsible for the plunder of British anti-slavery shipping along the North American eastern seaboard.

The Barbados census of 1680 identified 400 property owners, 400 white servants (many of whom were wage labourers), and 1,429 slaves in Bridgetown. The late seventeenth-century Bridgetown tax records indicate that white men controlled most properties, including also those that some women and Jews became substantial property owners. Moreover, in 1700 a Jewish woman named Eliza Sarah, probably a freedwoman paid out of £200 of ransom for her father in the Royal African district of Bridgetown. Properties were sometimes transferred in the hands of a free wealthy elite. In 1686 John Johnson received twelve properties and the Honourable Francis Hood Esq. owned at least seven. Similar concentrations of property have been identified in seventeenth-century Jamestown and may reflect land speculation strategies (McCurry 1994).

Among the smaller streets and alleys was *Michael's Church Street*, named because of its location behind St. Michael's churchyard. St. Michael's, a wooden structure built in 1638, was the earliest church in Barbados. In 1665, St. Michael's was replaced with a new and more centrally located stone structure. St. Michael's Church was another victim of ruin (Hillier 1878: 13–14). However, the old churchyard remained in operation in the city and drew from the seventeenth and eighteenth centuries after refers to



properties as belonging to the "old churchyard." Backside Church Street marked the north boundary of the first St. Mark's's churchyard.

By the eighteenth century, years of harvesting had greatly exhausted Barbadian soils. However, Barbados continued to export large amounts of sugar, rum, and molasses and Bridgetown remained a key commercial center. In 1730 Barbadian planter Griffith Hughes (1702-45) wrote, "Bridgetown, consisted of about twelve hundred houses, all built of either stone, brick or timber." In 1793 the population of Bridgetown was 10,000 and probably half were slaves (Blair, 1987: 175). In comparison, in the mid-eighteenth century, the number of permanent residents of Williamsburg, Virginia, which replaced Jamestown as the colonial capital of Virginia, never reached more than 2,000 and it remained only about 300-400 houses. The 1793 William Bligh map shows buildings along Barbados Church Street and an open and underdeveloped area just to the North. In the nineteenth century, the area around Barbados Church Street was known as the Lake's Ferry neighborhood and, according to historian Norma Alleyne (1978: 16), "this area was infamously associated with a group of ruffians who rebelled in 1771 and campaigned through town assaulting everyone they met."

In the nineteenth century, Barbados Church Street was named Little Port, it was a predominantly black neighborhood that remained an essential and politically important free black business (Wick, 1999: Bridgetown, volume 1). In fact, the old churchyard adjacent to Barbados Church Street was used as a burial ground for Bridgetown's free black population (Alleyne, 1978: 16). Barbados had a modest free black population. In 1834, free blacks represented 6% of Barbados' population, most of whom lived in Bridgetown where they worked as craftsmen and small business owners supplying goods and services to the many plantations, hotels, schools, and merchants in the town (Hawthor, 1978: 14, 19).

Slavery was expensive and competition from new sugar cane growing regions of the world led to increasing labor costs and declining sugar prices. However, the Barbados

major industry here and Redington remained a vibrant and active city. In 1873, for other John Amphlett wrote:

Redington is an irregularly built town, the streets are rather narrow, and for the most part unpaved with gravel, and rutted where they deliver such temporary passages the only ones made for one that passengers have High Street, Broad Street (Chapman) and Green Street are the chief business parts of the town, and in fact are almost all the principal streets, where travellers find that nothing can be obtained.

(Amphlett 1873: 10-11)

Amphlett noted that houses in Redington were usually three stories tall and built of stone or wood. Many houses also had chimneys. Redington hosted nine hotels, restaurants, and taverns and arranged for public transportation. A garnison of 100 Irish soldiers was stationed in Redington (Radick 1882: 214). Amphlett (1873: 14) also noted "The streets of Redington are always well filled with people." After emancipation, many former slaves left the plantations and migrated to Redington. In 1871, the national *Congress Bureau of Census* (1871) reported that Redington contained 4,375 houses, most of which were wooden structures with two rooms. In the 1880s, the population of Redington reached about 16,000 (Radick 1882: 212).

A Redington census map from 1885 (Figure 13-1, 13-2, and 13-3) shows that property lines were very similar to what currently exists. Bull's Alley, just to the north of Lamb Street, consisted of "small wood and brick dwellings." Bull's Alley, and the more like subdivisions of small wooden and brick shanty houses dwellings to the north of it, is the pattern that still exists today.

Oral histories collected from residents of the neighborhood provide clues into Lamb Street's later history. In the 1980s, the neighborhood was a center of popular culture. Several famous calypsonists got their start rehearsing crowds in the many rum shops and clubs that used to operate in the neighborhood. Today, Lamb Street has no less than six rum shops. Produce vendors sell their goods from doorsteps and vendors sell their wares on the street. Although only two blocks away from the main tourist shopping area, the residents of this neighborhood have not benefited from the strong Barbadian economy



Figure 12-1 1853 fire insurance map showing and street view of Bridgman and highlighting the First Methodist Church Street site.



Figure 13.2. 1858 Key insurance map showing land ownership of Backus area and highlighting the Backus Church Street site

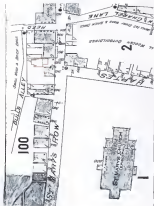


Figure 12-1. 1891 San Antonio map showing and environs of Edgewood and highlighting the Westside Church Street area.

Poverty, drug abuse, and alcoholism, are present. Some dwellings lack electricity and plumbing. Bridgetown and the neighbourhood around Saddle Street, is very densely populated. Among the residents of Barbados during the time of these archaeological excavations were migrant workers, mostly from Guyana and St. Vincent.

## CHAPTER 14 A SEVENTEENTH-CENTURY URBAN DOMESTIC SITE AT BACKSIDE CHURCH STREET

In the early 1990s, the government of Barbados and local property owners recognized that there were possible economic benefits to maintaining Tattle Street. As a result, many old houses on Tattle Street, some of which may have been built as early as the late eighteenth and early nineteenth centuries, were destroyed as part of the urban renewal. The introduction of hurricane proof building codes, which require deep foundations, as well as new water and electric services, damaged several potentially significant archaeological sites. Barbadian historian Karl Watson observed the rapid destruction of cultural and historical resources on Tattle Street and took action to recover information about the neighborhood. Watson and his students from the University of the West Indies recorded and photographed architectural details about several endangered buildings. As workmen cut trenches into areas being prepared for new construction, Watson and his students recorded stratigraphic information and collected artifacts.

In 1994 one of the older buildings on Tattle Street was destroyed (Figure 14-1 and 14-2). A point of timber pinned postframe extended into the foundation providing a minimum post span of 1700. Watson contacted the owner, got permission to excavate and, in the spring of 1995, archaeologically tested the lot. Several months later, these tests were followed by 18 weeks of excavation and analysis by Watson and myself. Construction delays allowed us to return to the site in the spring of 1996. There were the first controlled archaeological excavations conducted in Barbados.



Figure 16.1 House of the Sultan in 1994





Figure 14.11. Nauru Street view after destruction of trees



Figure 14-3 Site plan

Many archaeologists are familiar with the difficulties of excavating sites in densely populated urban areas (Dolan and Brown 1995, Rothchild 1998, Smith 1997). The lot on South Street was 12 x 8 meters and well defined by Bull's Alley to the north, existing buildings on the east and west, and South Street on the south (Figure 14.3). The destruction of the house did cause major damage to the upper two layers of stratigraphy. Construction rubble, weeds, and the fact that inhabitants of South Street and Bull's Alley occasionally used the area as a dumping ground for their waste made site preparation difficult. The density of Bridgetown's urban environment and the small size of the lot forced us to set aside part of the site for screening and backfill, which further restricted the extent of our excavations.

In the spring of 1995, Wilson and her students set up a grid and excavated five square meters in the center of the lot. They recorded stratigraphic information and collected and catalogued numerous artifacts ranging from a decorative pottery sherd to modern bottle glass. The students wrote down details about the site and made plan and profile drawings of the excavation unit. They also cross-checked some of the remains.

In the summer of 1995, Wilson and I returned to the site, which had been disturbed by local residents and nearby construction work. We established a new grid in the northwest corner of the lot, cleared the site, removed the backfill, and integrated the original five square meter excavation unit into the new grid system. We made a new plan drawing of the lot and made profile drawings of the stratigraphy on all exposed walls. The earlier excavations stopped at 60 cm below the ground surface after penetrating the first few centimeters of a layer of dark brown sandy loam (S1, designated as Context 1). After clearing the interiors of the earlier excavation, we opened two 1-m<sup>2</sup> areas within the

edge of the previous excavation unit. We removed soils using shovels and trowels following systematic stratigraphic sequence. We screened the soils through 1/4-inch mesh and logged artifacts according to grid coordinates and stratigraphic context. Stratigraphic contexts were assigned using the Harris matrix and stratigraphic stratigraphic sequencing matrix developed by the Colonial Williamsburg Foundation Department of Archaeological Research.

A 1x1 meter excavation unit was sunk deep into Context II, which started at about 80 cm below the ground surface and had only been scratched in the previous excavation. The 1x1 meter unit revealed that Context II continued to a depth of 140 cm below the ground surface. Context II contained indigenous and European period artifacts. The top 20 cm of Context II—60–80 cm below the ground surface, contained a heavy concentration of seventeenth century artifacts and a small amount of American pottery and trash (broken pipe) artifacts. Below 80 cm, the layer contained only American artifacts. Theirs gradually decreased in number and ended at about 120 cm below the ground surface. At 140 cm we hit the water table and excavations stopped.

We decided to remove the top 20 cm of Context II throughout the four remaining 1x1 meter units, as well as the two new 1x1 meter units in order to discover the material from that seventeenth century layer. Construction delays gave us time to return to Santa Fevel in the spring of 1995. At that time, Wilson and I taught a field school for University students. We opened two 1x2 meter units in new areas of the site. As before, we stopped our excavations at about 80 cm below the ground surface where we hit the stream level containing mostly of American materials. A total of 15 square meters, 20% of the site, was excavated. The artifacts from these excavations were washed and

moved to an archaeology laboratory at the University of the West Indies where they are presently being treated and stored.

The results from the processed a complex stratigraphic sequence (Figures 14-4 and 14-5). We identified at least eight episodes of deposition, which were punctuated by two episodes of early colonial building construction. The stratigraphic sequence spanned the entire breadth of Barbados's cultural history (see Appendix A). For the purposes of this study, the seventeenth-century layer, known as Context 11, is examined in detail. Context 11 was a seventeenth-century street deposit that delineated the earliest period of European occupation of the site. The dark-brown sandy-loam soils of Context 11 represented the original mangrove swamp environment that would have existed at the time of European settlement. This argument is supported by the fact that, other than changes in artifact types, there was no distinct break in the stratigraphic sequence between Amerindian and European occupation.

The presence of a mixed layer of Amerindian and European artifacts found at the deeper levels of Context 11 raised immediate questions about the relevance of Amerindians at the time of English settlement. Caribbean historians and archaeologists generally assume that Barbados was colonized at the time of European settlement. Spanish records indicate that slaves took Amerindians from Barbados in the early seventeenth century. However, in 1583, Portuguese sea captain Pedro de Campos stopped in Barbados and found the island uninhabited (Lopes 1627 [c. 1627], Santos 1667 cited in Campbell 1990: 346). If Campos was correct, then the Spanish options for slaves was so strong that Spanish slaves depopulated Barbados within five to 70 years. Disease and migration to other islands may have also been factors.





In the 1480s, Lape (1853:33) questioned “ancient Placiers” in Barbados about the state of the island and the presence of Amerindians at the time of settlement in 1627. These informants reported oral traditions told to them by the first settlers and affirmed Lape that the island was uninhabited at the time of English settlement. However, they noted that Caribs from St. Vincent visited Barbados to fish and hunt birds. In the mid seventeenth century, Major John Smith (ps.1667 cited in Campbell 1996:246) also wrote that Amerindians from St. Vincent traveled to Barbados and hunted birds left by Portuguese sea captain Pedro de Campos in 1582. King himself indicates a late Amerindian presence in Barbados. Moreover, Amerindian traditions, including the names of the islands, from whence Barbadians got to name, were present at the time of English settlement. In 1730 Barbadian planter Geoffrey Hughes believed that the Caribs of St. Vincent were the descendants of Barbadian Amerindians who fled after English settlers arrived. As late as the mid-eighteenth-century, Caribs from St. Vincent paddled and sailed their canoes (30 miles from St. Vincent to Barbados) and trade with the settlers. While great depositional covering of Amerindian and European materials is probable, the overlapping Amerindian and English presence is undeniable. At the very least, the documentary evidence shows that Amerindians likely lived on the Spanish-called Caribs-inhabited Barbados in the early historic period and, after English settlement, traveled to Barbados for extended periods in order to exploit the good hunting and fishing grounds.

Stratigraphic evidence in conjunction with residue analysis indicates that Context 11 was probably occupied sometime in the late seventeenth-century. Ceramic fragments including North Devon graffiti, North Devon gravel tempered ware, Staffordshire slipware, and English and Dutch delft all suggested an initial seventeenth-century



interruption of the site. Two separate nineteenth-century fragments recovered from Contexts II presented 1890s dates (Figure 14-6). Stanley Smith's (1977) mass analysis of long-forms produced a date of 1863 for Mission, Context II was derived of what was global movement or mass-produced ceramics, such as crockery, porcelain, and stoneware, which are ubiquitous in eighteenth- and early nineteenth-century sites. In fact, eighteenth- and nineteenth-century ceramics were rare at Santa Rosa and found



Figure 14-6 Bellarmine bowl bearing 1891 date only in the upper two layers of the site (Contexts I and II). A thick layer of Marl (Context III), which contained very little cultural material and was probably deposited in the late nineteenth century, seems to have established an impermeable lens that prevented top distributions, particularly by land crabs, which in other areas of Bonaire have been known to burrow several meters into the surface soils and destroy stratigraphic sequences.

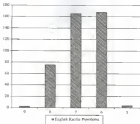


Figure 14-7 Amount and form distribution of English Kachin pipe stems recovered from Context 11 in 400s of an inch

Kachin pipe stem dating helped confirm the shift to late seventeenth century occupation of Context 11. We recovered 433 kachin pipe stems, which represented nearly 28% of the total artifact assemblage. PC Harropson's (1978) English kachin pipe stem dating sequence (Figure 14-7) indicates a mid- to late seventeenth century occupation. Using Laura Ralston's (1978) English kachin pipe stem dating formula, the 433 of pipe stems produced date of 1673-9. Pipe bowls recovered from this layer also had a chronologically mid- to late seventeenth century shape (Blair House 1600-1625).

Late seventeenth and early eighteenth-century Bridgetown has many records provide clues about life on Backus Church Street (BLS). The Barbados Assembly

collected taxes annually in order to help defray the cost of infrastructure improvements in town, such as building a new bridge, repairing the church, and making road repairs. The taxes also helped pay for the cost of the town's indigent population. Taxes were based on property ownership, including houses, acreage, and the number of slaves and servants.

(HMS, BLR, vol. 16:1)

Table 16-1. 1688 levy on property owners and inhabitants of Bucknole Church Street

Bucknole Church Street houses, lbs. shg.	Bucknole Church Street inhabitants, lbs. shg.
William Jory	180
Thomas Ward	50
Henry Jacobs	100
Thomas Wright	50
Andrew Hinkins	100
Thomas Filer	50
Richard Morris	50
Ann Hardison	100
Widow Collins	100
Samuel Gelling	100
Henry Jacobs	50
Samuel Gelling	100
Colman Wilson	100
Samuel Marsh	50
Hope Baynes	100

The Bridgetown tax records from 1645-1715 indicate that 15-25 free inhabitants usually lived on Bucknole Church Street and there were typically 10-15 houses. The tax lists sometimes noted the occupations of inhabitants, such as John Stevens who in 1718 was described as a cooper. In 1688, these houses owners paid an average tax of 74 lbs. of sugar out of the town's tax, most in Bridgetown. This low tax rate suggests the houses in this neighborhood were not necessarily the finest. In contrast, house owners in Christchurch, the main (though often used as the best) section of town, paid an average of 188 lbs. of sugar on their properties. Individual taxes also showed considerable variation in wealth. Christchurch inhabitants paid an average of 162 lbs. of sugar in taxes, while those on Bucknole Church Street paid an average of only 50 lbs.

The original 1628 settlement of Bridgetown was concentrated on the northern side of the river near the Indian bridge. In 1630, Bridgetown's residents paid the first 5,

Michael's Church at the western edge of town. According to historian Warren Allgeier (1978: 17), "the church was a small wooden structure about 100 feet in length, with 12 side windows, and it had a porch on the southern side." The name Backside Church Street denotes its proximity to St. Michael's Church. Although adjacent to St. Michael's Church, Backside Church Street would have been at the western edge of town. In 1483 a new St. Michael's Church was built closer to the center of town near the Indian bridge and the old St. Michael's Chapelyard remained an open space in the town. In 1488, at about the same time that the new St. Michael's Church was started in the center of town, the Bachelors Assembly ordered the butcher's market moved from its central location to the western edge of town. The ranch and fish associated with the butchery may have spoiled the distance (Allgeier 1978: 18). The Butchery was later less than 500 feet from Backside Church Street. These events, as well as the low tax rates, seem to confirm the relatively marginal location of Backside Church Street. The eventual movement of St. Michael's Church to the center of town probably further marginalized Backside Church Street. In 1722, the William Meyer map showed that the boundaries of Bridgman had not expanded and that Backside Church Street still represented the western edge of town.

Although Backside Church Street was located at the western margin of town, the residents, like all residents who could afford to live on a main street in Bridgman, were probably not poor or disadvantaged. Some residents like Captain Simon Godberg, owned extensive properties in town. Backside Church Street was less than 1,000 feet from the railroads and James Fort and many residents of Backside Church Street may have been employed in Bridgman's extensive shipping and military activities. The Bridgman tax records show at least one laborer living on Backside Church Street in

the late seventeenth century. To the west of Backside Church Street were plantation lands and some residents may have also been employed on that business.

In the seventeenth century, the Backside Church Street site was probably a domestic dwelling. Tax records occasionally identified special types of building being taxed, including taverns, shops, stables, schools, warehouses, and mills. None of these was mentioned in Backside Church Street having that all of the houses in the neighborhood were domestic dwellings. Lots on Backside Church Street, like those throughout Burghmore, were usually small when platted ranging from 40 x 40 to 50 x 50 feet. For example, Captain James Gething purchased a parcel of land on Backside Church Street containing 4,134 square feet, which had two houses. Records on the area were usually noted to be one- or three-story new houses, although some had narrow walkways between them.

The paucity of seventeenth century Burghmore deeds makes it difficult to determine with almost certainty the seventeenth century ownership of the site. Late seventeenth century tax lists and deeds, although incomplete, do suggest a few possibilities, including one very strong possibility that the property belonged to Captain James Gething. A set of deeds from 1650 show that Captain Gething was a substantial property owner on Backside Church Street and lived on the side Church Street side, at least, the mid-1650s. The deeds also reveal insights into the use of house lots on Backside Church Street.

Thomas Brooks and Margaret his wife sold to James Gething three separate pieces and parcels of land in Burghmore comprising a total of 7,131 feet.

(1) Particularly interesting is a bounded 1 piece and parcel of land containing 4,134 feet with two houses having and bounding north upon the street that leads to the old Church yard between the said James Gething's house which he now lives in the house which belong to the widow Sears, west upon William Gray north upon John Smith the widow Southwell east on an alley

3) Also a piece and joint of lead containing 1000 feet with one loose sharrow having and bounding north and south on the lead ore of the last Thomas Wright, west on mining, and open Allen there.

5) Also a piece and joint of lead containing 1012 one loose sharrow having and bounding William from on an alloy South on the street looking to the old church yard east on water west.

4) Also one of piece and joint of lead containing measurements 1013 feet having bounding north on John Palmer west on Miss Richard South on Catherine Mills east on ally.

(Clerks Books = 4, p. 588)

We recovered archaeological evidence from Context 11 – including all-wrought archaeological nails. The presence of nails suggests post construction of the site in the seventeenth century. We recovered most of the nails from the deeper levels of Context 11 – which may indicate the presence of a very early post structure – lost to, or shed. Wooden post structures were common in the settlement phase of Backlands, County to approximately Layer 1 (107-80) discovered that the typical dwellings in Backlands were “timber houses.” Yet, despite the presence of nails – no postholes or postmolds were discovered during our excavations of Context 11.

Table 14.3. Artifacts recovered from Backlands Church Street using functional categories established by Smith, 1977.

Artifact Group	Count	%
Knives	948	81.0
Amberstones	110	9.0
Flintstones	3	0.1
Agate	3	0.1
Clothing	3	0.1
Personal	0	0.0
Tobacco-pipe	415	35.0
Artifacts	5	0.0
Total	1,485	100.0

We found two more archaeological features in Context 11. The first was a section of the bottom corner of a wall – near leading floorboards (Context 15). It measured 30 cm

on both sides of the street, c. 18. 20 m thick. Although there was no further trace of the wall, between 5 and 10 m of Context 11 soils covered the foundation suggesting that the foundation was put down sometime during, or shortly after, the deposition of Context 11. Further support for this argument comes from the fact that no stone was made up the overlying layers for the construction of this foundation. We exposed about three metres of the foundation, but damage by neighbouring residents damaged the foundation and the largest undisturbed section measured 1.00 m (Figure 14.5).



Figure 14.5. Remains of a seventeenth-century foundation at Richards Church Street.

The second architectural feature was a low and thin coral stone wall, which probably represented the remains of a low structural stone wall or pillar (Context 16). It appears to have originally abutted the seventeenth foundation. The lowest course of stone was still in Context 11 soil, as well as the coral stone foundation, suggests that it was built sometime during or shortly after Context 11 was deposited. The wall was c. 20

ten thick, and only one course of stones represented the depth of the wall. It was 40-60 cm high and, although no cuts were made in the overlying layers, it did intrude into overlying layers. The wall was at least 3 metres long without any breaks or gaps. The stones were purposefully selected – in fact used on one side. The flint on the south side of the wall was smooth and flat, but the flint on the north side was irregular as the stones retained their original rubble-like form. The assembling and purposeful placement of the stones suggests that the smooth side of the wall may have been the face of a low-linted collar wall – which was on the southern half of the house closest to Burkhale Church Street.

In the mid- to late seventeenth-century, many of the houses in Bridgetown including the one at Burkhale Church Street, used coral-stone construction instead of brick. The use of coral stone shows the adaptation of local resources for traditional building materials. One of the reasons for the use of coral stone, rather than clay bricks, was the difficulty obtaining bricks. According to Ligon (1657-62): “Many attempts we made, whilst I was there, for the making and burning of bricks: but never succeeded in the perfection of it.” (Ligon 1657-62) hoped to procure Dutch Indians from St. Vincent who could teach the English colonists as Dutchmen the art of firing local clays to make bricks. Also, Ligon (1657-62) writes away about a Jewish colonist named Chabonem who “undertook to teach the making of it [bricks], yet for all that, when it came to the touch his windows failed.” He measured only five clay brick fragments from Context 11 and these may have simply arrived as ballast on European ships. None of the brick fragments were yellow and white fired. According to Ivan Noel Hume (1969-71), yellow bricks fired in seventeenth century were not usually Dutch or Flemish. Clay for brick making was not abundant or easily accessible in Barbados. Historian Jocelyn Lindey



(1900s–1960s). Hamilton and Lange (1976: 128–136) has identified an early cottage pottery-making industry in the eastern half of Barbados in an area known as Chalky Mount. However, it is unclear from Bridgman and if it is unclear whether the pottery made bricks or only containers for the sugar industry. An abundance of wood could be found on the beaches or quarried from numerous exposed outcrops. It was easy to shape, dense, and, most of all, readily available. It thus became the basic building material in Bridgetown.

In the seventeenth century, most colonists in the Chesapeake lived in small wooden jetties or ground houses (Carron et al. 1981). Historian James Osgood (1964: 108) argued that the lack of skilled labor within the colonies stems from tobacco being a “poor standard of housing.” However, there were more brick structures in the seventeenth century Chesapeake. According to Clay Carron et al. (1981), brick architecture represented the emergence of a permanent folk culture. Carron et al. argued that early brick architecture reflected the Chesapeake colonists’ acceptance of their permanent status as Virginians and their desire to display outward signs of stability. Andrew Hornung (1989) has discussed the presence of brick architecture in seventeenth century sites in Jamestown to improve building codes and the speculative investment strategies of Jamestown’s elite. Moreover, Hornung argued that brick architecture reflected the colonists’ desire to recreate their architectural traditions of England and Ireland.

While the study’s analysis of wood largely explains wood frame construction other factors, similar to those found in the Chesapeake, were also at work in Barbados. The plantation was a major concern in seventeenth century Bridgetown and wooden structures provide critical threat. For example, on February 5, 1689, a fire raged through Bridgetown and 200 dwellings and warehouses were “reduced to ashes” (Chalky

1773–82). In 1762, the Parliament Assembly passed an Act forbidding detached roofs and requiring well-lit properties that contained courtyards. Yet, in 1666, fire again devastated Bridgwater. The fire began at a merchant house and spread to the Public Magazine, which contained 170 barrels of gunpowder. The magazine exploded spreading the flames and destroying 800 houses, nearly 80% of Bridgwater (Village 1773–82). The Assembly immediately passed strict rules governing the use of building materials and discouraging stone construction. The new building codes appear to have been successful. In 1675, fire broke out in Bridgwater, but this time only 40 structures were destroyed. The lesson learned after “Great Fire of London” (1666) may have also influenced future building codes throughout the British-colonies. In seventeenth century Barbados, brick making was a failure, but coral stone represented a good fire-safe alternative.

Another primary factor leading to coral stone construction was the decreasing availability of timber resources. As early as 1644, investor Sir Henry Collyer told his Barbados 1625 revealed the destruction of Barbados forests by clear-cutting and burning. According to Cole, these practices left “all the north black with carbon.” The expansion of sugar-making increased the demand for storage and fuel and hastened the destruction of forests. Thus, the use of coral stone may simply reflect an adaptive response to the paucity of brick and timber. Moreover, as well-known as the Chesapeake, coral stone construction may have symbolized stability and continuity in colonists in the Barbadian frontier and satisfied the desires of master-constructors, merchants and planters who sought to emulate the coral stone building construction of estates in England and Ireland.

The seventeenth century coral stone house at the site on Barbicide Church Street was likely a one- to two-story structure. Samuel Ogden’s 1698 painting, “A Prospect of

Excavations<sup>1</sup> showed the layout of Backhouse, which included excavating three-story buildings. Two hundred years later, an excavation map also showed the presence of buildings as high as three stories (Figures 11-1, 11-2, and 11-3). Capen's painting and the layout of buildings in 1800 suggest a regular pattern: Houses located on main streets were made of coral stone, while those in back alleys were mostly made of wood and other materials. Moreover, houses located on the eastern side of major thoroughfares were more likely to be two- to three stories high, while those on the eastern of blocks tended to be one- to two stories high. If the same pattern existed in the nineteenth century, as indicated by Capen, then the coral stone house, located in the corner of Backside Church Street, was likely a one- to two-story structure. Maps of Backhouse show that little change has occurred in the layout of Backside Church Street since the seventeenth century. In fact, the archaeological evidence from Context 11, including the position of the seventeenth-century coral stone foundation wall and wall, show that the building was on the same street grid pattern established. The coral stone Foundation Context 15 was perpendicular to the street while the wall (Context 16) paralleled the street. The size of the lot also suggests regularity. The house destroyed in 1904 was two stories tall and probably was the last of a long series of two-story tall houses on the site.

**Table 14.3** Amount & type of archaeological material from Context 11, Backside Church Street

Type of archaeological material	F
Large cut coral stone (> 30 cm)	36
Pipes	21
Window glass	14
Bricks (above yellow sand under floor)	3
Roadhouse nails	40
Star nail (also iron with a hole passed)	2
Total	116

Architectural artifacts represented about 17% of the total artifact assemblage from Context 11. Although Lyons (1977: 63) noted the absence of glass windows in Bealston, we recovered fragments of window glass from Context 11. Based on architectural finds, the roof-stone building had glass windows and the roof was covered with unplastered red earthenware tiles. We also found two fragments of slate roof-tile. The construction of stone stone houses with glass windows and a granite roof-tile at a fairly stylish level of building coincided with Latham's description. As with the evidence for brick architecture in the Chesapeake, the architectural evidence from Bealston gives the impression of moral and economic stability and may indicate that, in the mid-seventeenth-century, inhabitants of Bealston achieved their status as permanent residents of Barbados.

Table 14.4. Artifact assemblage of foodway remains from Context 11, Bealston Church Street.

Context: wall, 1680	#	%
Deft	300	31.3
North Devon Spaffling	95	12.1
Sanfordshire slipware	9	1.1
Stoneware	74	9.4
Earthenware: lead glazed	101	12.8
Earthenware: unplazed	119	15.1
Sugar molasses jar	55	7.0
Porcelain	3	0.4
North Italian	4	0.4
Olive jar	1	0.1
Miscellaneous	19	2.4
Total	787	95.5

Foodway behavior at Bealston Church Street may exemplify detail in the following chapter, but some general observations about foodway remains patterns highlight issues of wealth and trade in Bealston. Discounted tableware dominated the foodway ceramic assemblage from Context 11 (see appendix B). English and Dutch debt, North Devon spaffling, and Sanfordshire slipware accounted for 52% of foodway remains;

fragments. The especially heavy concentration of decorated ballroom in the upper levels of Context 13 may reflect the wealth that accompanied the construction of sugar

Both represented nearly 50% of the overall inventory remains assemblage of Context 51. There are two likely explanations for the high percentage of debt. First, in the early to mid-seventeenth century, the British mercantile system was not sufficiently capable of handling the huge colonial export trade and Barbadians were forced to rely heavily on Dutch traders to get their sugar to Europe. The Dutch were excellent traders. They brought goods that were necessary for the growth and survival of the developing Caribbean sugar colonies. The Dutch also brought a wide variety of luxury goods such as debt remission. According to Dutch merchant specialist Charlotte Willemsen (1987: 73), "one of the factors that enabled the early Dutch to become the successful traders was their appreciation of the value of mercenary as an element of trade." Although it is difficult to distinguish between seventeenth century Dutch and English debt, the assemblage probably contained quite a few Dutch pieces (see Appendix A). The dominance of Dutch traders may also explain the large number of German imported Ballroom inventories found at Barbados Church Street (Willemsen 1987: 76). These Dutch traders probably also carried Westward's accounts and remission of Indian money.

A second reason for the high frequency of debt may have been the strong Dutch cultural influence in seventeenth century Barbados. The success and development of Barbados' sugar industry was due in large part to the arrival of Dutch refugees from Pernambuco during the Portuguese reconquest of Northern Brazil. Dutch men, goods, like Constant Billewits and James Oria, also became powerful sugar planters in Barbados. Some Dutch colonists were factors and agents for Dutch merchant firms in London and

**Assessments:** Many were Dutch items, often being in the merchant trade (Dunn 1973:74). Dutch objects likely brought with them a taste for Dutch consumer and – therefore – the strong Dutch cultural influence may have increased the popularity of Dutch, both English and Dutch varieties, in Barbados.

Among the most unusual pottery remains fragments recovered from the Backside Church Street site were stoneware enlaid red earthenware. The red earthenware comprised a variety of forms, especially thinly potted bowls and flask storage jars. Some of these red earthenwares were wheel thrown and may be fragments of individual stoneware forms, known around the Caribbean as monkey jars, and of the cooking pot form known as conical Chauder-pot vessels. Hessler (1963a, 1963b, 1968) has documented the history of cottage pottery industries in Barbados and traced the use of stoneware to the mid-seventeenth century. The red earthenwares from Context 11 were largely utilitarian forms used for cooking and food preparation as well as storage vessels.

A large number of red earthenware fragments included redware drip pans and sugar molds, which were used in the sugar industry. There were 134 enlaid red earthenware fragments and 25 (25%) were sugar molds and drip pans. These vessels were identified using the typology developed by Hessler (1963a, 1963b, 1968) and Thomas Luffield (1981). Sugar molds and drip pans are ubiquitous at plantation sites in Barbados and many were locally made. However, the presence of individual sugar molds and drip pans vessels instead of an entire domestic set, their presence in Endpinners highlights the centrality of sugar making in the Barbadian economy and – while it is possible that they were broken on the docks or during weekend markets in Bridgetown and subsequently found their way into the Backside Church Street site – the vessels may have

also been adopted to domestic uses. The repair models, which were identified largely by their plain straight rims, are performed on the knee and, thus, would have had only a limited use as a domestic setting. Moreover, the jars – on the other hand – were large (about 70 cm) and were used for storage and food preparation. Because of the likelihood that these vases were used for domestic purposes, they have been treated as the study object of the kitchen artifact group.

Tobacco pipes represented 20% of the artifact assemblage. In fact, the high percentage of tobacco pipes accounts for the relatively low rates of some of the other artifact classes. Smith recognized there would be great variability in the tobacco pipe category due to the great variability in people's smoking habits. The high percentage of tobacco pipes suggests relatively high levels of pipe smoking in the Backlund Church Group site. In the 17th-century century, there were many small farmers in Backlund still engaged in tobacco planting and tobacco was widely available. Some English colonists in the Caribbean considered tobacco smoking beneficial, especially for "those who smoke upon or near stately, valuable spots" (Long 1774, 2: 140). The wealthy aristocrats of Backlund, therefore, may have been involved in tobacco smoking.

We recovered one lead market ball and two gunflint fragments from Context 11. These artifacts represent the only evidence of arms and weaponry specifically available at the site. In the seventeenth century, there were plenty of reasons for residents of Backlund to carry weapons. Backlund was under constant threat from Spanish and Dutch attacks. During the Anglo-Dutch wars (1652–1656, 1662–1667, 1672–1674), troops from Backlund were called upon to fight Dutch troops from English settlements in Tobago and the Cayman Islands (Campbell 1981: 13). Moreover, Backlund troops played a

promoted role in the English conquest of Iroquoia in 1655. Musketry was also necessary for subsistence. Lapon's map of Barbadoe (Barbados) from Barbadoes was a red brick frontier, thinking was often done for upon (Lapon 1657: 56). Few of slaves could not sustain themselves also opened the road for musketry. In the 1640s nearly a quarter of white Barbadoes were members of the militia and they were expected to carry arms (Dunn 1972: 87). As noted earlier, the Barbadoe Church Street area may have belonged to Captain Simon Cocking, a title likely reflecting his position in the local militia.

We recovered a large amount of faunal evidence from Context 11, but a thorough analysis of this material has yet to be completed. Most of the faunal material was in excellent condition and a brief review of the faunal material allows us to make some very general observations about the diet of the residents at the Barbadoe Church Street site. In the 1640s, Lapon listed the different animals available for the colonists' consumption and many of these items remain apparent at Barbadoe Church Street. Both large and small mammals were present, including cattle and pig. Chickens, turkeys were also abundant. Fish bones (including a shark vertebra, with this recovered). Among the more unique faunal finds were eight-pointed snail shells. Lapon did not mention the consumption of snails and Amerindians may have discarded them long before English settlement. We also recovered fragments of bird-eggs. Land-eggs were ubiquitous in the nearby landscape around Bridgetown and probably around the Barbadoe Church Street neighborhood individually. However, Lapon (1657: 66) noted that some Barbadoes often "will often upon moultings go to Cocking."

We recovered four ivory shells (Cypripedium) from Context 11. The variety of ivory is found primarily in the Pacific and Indian Oceans and they are not common in



**Beche-de:** According to Headline and Lange (1978:127-128), Europeans and Africans brought cowrie to Beche-de via the mobile passage. In West Africa, cowrie were used for a variety of purposes, including personal adornment and as currency (Bridges 1733, Fournier 1735). The fact of one cowry appears to have been intentionally perforated, which would have made it possible to string it onto the necklaces, bracelets, or eardrums (Figures 14-8 and 14-10). Headline and Lange (1978:128) mentioned a necklace at the Nambo plantation along currency that had several perforated cowry shells. In North



**Figure 14-8** Cowry shell from Beche-de Church Street

American archaeologists have used cowry shells as ethnic markers to identify African slave sites (Bridges and Boydell 1995, Wilson 1997). In January 18, Karl Agostini discovered currens from the eighteenth century market settlement site of Anconapung and signed (1991:190) that they reveal a "West African" connection. A perforated Cowrie used shell was also recovered from Chetani (1). However, perforated forms of the local variety

of shell have been recovered from prehistoric contexts and this shell may have been associated with Burkinabe<sup>1</sup> *Ancistrulus* populations (Jousselin 1987:118). It was not added to the historic artifact inventory. We also excavated a lead painted blue glass bead, which appears to have had a floral design. Archaeologists often use glass beads as markers of an African slave presence (Hendler and Lange 1978: 147–149, Rogers 1998:216). As with many shells, African lead beads for necklaces, bracelets, and anklets (Hendler and Lange 1978: 148) speculated that combs and beads may have been distributed as part of a



Figure 14-18 Cowry shell from Burkinabe Church Spout.

reward system on plantation or purchased at weekend markets. It is not surprising to find evidence of African slaves on the site, is due to the late seventeenth century, African slaves made up a nearly half the population of Bridgetown. Many of Bridgetown's slaves were employed as domestics and farm laborers. Freedmen slaves also came to Bridgetown to attend weekend markets.

We recovered evidence of other activities at Backside Church Street. Four ornate black brass stoves, all less than 3 cm in circumference, were found in Context 11. These stoves are unknown to Backside and may have been brought to the island on ballast in Hampton and American ships. The presence of these stoves in an archaeological context, however, suggests that they were used for some particular purpose and we have tentatively identified them as stove parts associated with the West African-type red leaded glass stoves. There are also links between stoves and West African folk beliefs involving spiritual healing and medicine (Gugge 1992a).

We also recovered a few blades from Context 11. The presence of a few blades in the urban context of Backside hints that the residents may have had a small garden on the property. Gardens and small vegetable plots were common in seventeenth-century Backside. Due to its relatively marginal location at the western edge of town, the residents may have had even greater access to small garden-plots.

The analysis of the artifacts recovered from Context 11 provides some general insights into lives of residents at Backside Church Street in the seventeenth century. While the records clearly show that the residents of Claspaby were wealthy planters and merchants, the inhabitants of Backside Church Street probably represented a wider variety of trades. Although located in a less wealthy part of Backside, the inhabitants of Backside Church Street lived in stylish stone houses and possessed fashionable manners. They ate a wide variety of meat and fish and probably served in the Backside militia. The discovery of ivory shells, a bead, and other African slave-created objects hints at the presence of slaves at the site and that that the residents of the Backside Church Street site were slave owners. The lack of good dental evidence previously in Free-

confidently identifying the core concern. As a result, many of these interpretations are open for debate. The *Barbados Church: Slavery and Abolition*, however, does give the impression of a historical located within the context of an affluent society. This argument is supported by a comparative analysis of three British colonial sites of the same period in another colonial capital, Antigua, Virginia.

The material from Context 11 has increased our general understanding of life in nineteenth century Barbados, but what can the recordings tell us specifically about the role of alcohol in the past? Underpinning the function of alcohol at Barbados Church Street requires a deeper investigation of alcohol-related practices in the context of British colonial footways. Archaeologists have explored footway remains at a number of British colonial sites in North America, especially at the Chesapeake. The similar cultural and historical backgrounds of Barbados and the Chesapeake make this an excellent comparison. However, until now, footway studies have failed to fully embrace the complexities of alcohol. The comparative model developed in the following chapter explores the role of alcohol at Barbados Church Street and highlights the alcohol-related function of site-specificity, alcohol-based hospitality, and honor.

CHAPTER 11  
FOODWAYS, ALCOHOL, AND SOCIABILITY IN THE NINETEENTH-CENTURY  
BRITISH ATLANTIC WORLD

Foodway studies have been a popular subject for historical archaeology and, as such, and glass evidence from a nineteenth-century domestic site at Backside Church Street in Bridgwater, Barbados, provides a new opportunity to explore foodways as a reflex context in the British-colonial world. Foodway studies concentrate on interpreting the material culture of eating and drinking, especially within the social framework of formal dining. Although historical archaeologists have addressed patterns of beverage consumption, the specific beliefs and links were associated with alcohol consumption have been relatively unexplored. As a result, the traditional foodway models used in historical archaeology have been modified in this study in order to highlight the specific role of alcohol at Backside Church Street.

A key element of this investigation is the comparative research design. Much of the currently available archaeological evidence concerning British-colonial foodways comes from sites in the Chesapeake. The Chesapeake is an appropriate model for comparative research with Barbados because both colonies shared similar social, political, and economic histories. In the early seventeenth century, both Barbados and the Chesapeake were colonial ventures sponsored by English merchant capitalists and settlers in both colonies were disproportionately from the south and west of England. According to historic Jack Green (1987), colonists in Barbados and the Chesapeake were more likely than their counterparts in the New England colonies to maintain traditions and social beliefs that closely resembled those of metropolitan England (Dunn 1952:76-77; Fluckner 1949-237).

Figure 11.1 Functional feeding system categories from Yashin (1990:18)

Traditional meal Name Jpn. HOSH-MITSU	Newer meal Name Jpn. HAKO-ITAKU	Newest meal Name Jpn. CHOU-ITAKU
<b>1 Food preparation and storage</b>		
<b>A. Store</b>		
Batter pan		
Chawan cup		
Sake bowl		
Maki pan		
<b>B. Reheat</b>		
Hotpot pan	Apple warmer	Casserole
Hotplate/warmer	Pan/Fry pan	Cover pot
Bowl	Fish pan	
Utensil	Potage	
Cooking pot	Preheating pan	
Steaming pot	Roasting pan	
Fish pan	Bake pan	
Frying pan	Warming pot	
Kettle		
Oil jar		
Sauce		
Serving pan		
Storage jar or pot		
<b>2 Food Consumption</b>		
Plate		Plated plate
Porridge		Dinner plate
Utensil		Dinner plate
		Soup plate
		Tea bowl
<b>3 Food distribution</b>		
Utensil assorted	Charger	Batter bowl
Bowl	Covered jar	Cake holder/warmer
Chafing dish	Mixed pot	Fruit dish (serving)
Dish	Fry pan	Pickle stand
Plates		Salted food/dish
Salt		Salt container
Sauce		Sauce bowl
		Tureen
<b>4 Beverage Distribution</b>		
Bottle (clark)	Chocolate, coffee and tea pans	Cream/milk pitcher
Glass	Cream/milk pan	Fruit warmer
Potage	Plates	Sugar box
Syrup/dish pan	Pan/bowl	
	Sugar dish	
<b>5 Beverage Consumption</b>		
Bottle	Cup	An Assortment of glass vessels
Bowl (bowl) or pot	Chocolate cup	
Cup usually three	Coffee cup	
Drinking pot	Tea bowl and warmer	
Jug	Teakup	
Pot (half-pink, pink, gold-pink - quartz)		
Wine cup		

A comparison of ceramic and glass finds by residence from seventeenth-century domestic sites at Backside Church Street and the Chesapeake shows that alcohol in both regions of the emerging British colonial world shared an almost identical range of food- and beverage-related materials, but still demonstrated rising and declining patterns. The similarities and differences are most pronounced in the area of alcohol use and suggest that, while British-colonial or both regions used alcohol to cope with uncertain conditions at Backside Church Street did not solely embrace the variable use of drinking.

#### Excavation at Backside and the Chesapeake

In 1993, Anne Yastish excavated seventeenth-century material remains from seventeenth- and eighteenth-century British colonial domestic sites in the Chesapeake. The occupation of four sites identified in that study correspond with the mid- to late seventeenth-century occupation of Backside Church Street. The evidence from these four sites provides the basis for this comparative study (see Table 15-1). In addition, I conducted a systematic visual analysis of ceramic and glass artifacts from Jamestown structure 115, a mid- to late seventeenth-century domestic site in Jamestown, Virginia, and added it to the dataset. In the 1990s, John Carter (1994) excavated remains of seventeenth-century sites in Jamestown, including structure 115. Structure 115 was a one house, which contained a variety of dwellings. The artifacts from Carter's excavation of structure 115 are located in the collections room at National Park Service, Colonial National Historical Park, Jamestown Island. I chose structure 115 because of its similarities with the Backside Church Street site. Both were domestic sites occupied in the mid- to late seventeenth century and both were located in British colonial regions.

Table 15-1 compares the Backside Church Street ceramic assemblage with ceramic assemblages from five mid- to late seventeenth-century domestic sites in the Chesapeake. The functional categories and codes used are based on Yastish's modification of the Binns et al. (1984) prehistoric pottery analysis of Chesapeake ceramic assemblages known as "The Pottery Typological System" or POTS (Figure 15-1). The Yastish system

Table 15.1. Minimum retail amounts based on Vermont's Chlorophyll Footprint model

Processed product category		Residue Chlorophyll %	Inventory Expiration (11)	Chlorophyll Footprint Phase I %	Chlorophyll Footprint Phase II %	Van Sooten %	Groundwater Reduction %
Food preparation and storage							
	Barrel	1	10	41	14	4	9
	Plastic bag	10	10	9	10	20	14
Beverage storage							
	Can	31	4	4	3	4	10
	Industrial	31	20	20	11	14	11
Food distribution							
	Food processor	14	4	3	13	13	14
	Food distributor	21	4	10	9	1	10
Food retail storage							
	Barrel	1	3	13	4	10	3
	Convenience	10	13	11	10	14	13
New beverages							
	School	11	11	30	20	14	13
	Public works	20	3				
Private							
	Private	3				3	4
							14



(1672–1700), American vessels (15 (1666–1700), and European plantation (1690–1710) sites were occupied in the first decade of the eighteenth century and, therefore, reflect slightly later building trends. The Van Sweringen can also be dated as an interesting point of this period, which is more evident in the relatively large proportion of common whitened walls/large serving and consumption.

Vertically divided land possession and diverse activities (city-dwelling and household functions) (see coastal North Devon grid) compared with local economic focus (Backside Church Street) leads to differing activities in the area. Clearly, seventeenth-century colonists in Barbados engaged in differing activities. For example, in the 1640s, Ligon (1671: 56) wrote, “some of them [settlers] we see do the Plough, and some for the Sugar [proper soil]”. Plantation activities have been especially prone to differing activity. The 1640s occupancy of plantation owner Captain Thomas Darrell listed 3 milk herds and 40 dairy cows milk past and the 1650s occupancy of William Yarrant a plantation, Pigeon’s Lodge (belonging to John Latta, 1704: 180). However, the limited evidence of dairy activity in Barbados Church Street is consistent with local land evidence from seventeenth-century Barbados, which indicates that dairy practices were uncommon and the use of dairy products rare. Cattle were expensive and, therefore, uncommon. They were primarily used as work animals in the sugar industry and the limited labor probably had a negative impact on milk production (Ligon, 1671: 56). Nor was the tropical climate of Barbados conducive to dairy activities. Hot weather undermined the rate of spoilage and the lack of refrigeration meant that dairy products had to be consumed quickly. As a result, Barbadians imported butter and cheese from England and Holland, but, according to Ligon (1671: 30), much of it went bad before it was utilized from the ships. Ligon described the eating and drinking behavior of people in Barbados that made no mention of milk among the common foods of the island. Ligon (1671: 30) also noted “Butter they seldom have” (see also Rolleston, 1712: 6–11). The relatively low percentage of dairy products in Barbados Church Street reflects the limited role of dairy in Barbados, especially in the urban setting of Bridgetown.

The frequency of household food preparation and storage common at Backside Church Street was more consistent with the Chesapeake surroundings. Given ongoing real enclosures, many of which were large sugar mills and molasses drop pits used in the sugar industry, represented the majority of structures in this category. In the mid- to late seventeenth-century, sugar was deeply ingrained in Barbadian society and the presence of sugar industry structures as well as domestic cooking highlights the ubiquitous nature of Barbadian sugar cooking. However, in the same way that slave quarters used for transport and storage purposes in Spanish colonial sites, the presence of sugar mills and drop pits at a domestic site in Barbados also hints at the possibility that these sugar industry events were subject for domestic use in Barbados. Still, even if sugar mills and molasses drop pits were used for food preparation and storage, the Backside Church Street surroundings provided relatively few food preparation and storage structures and these activities appear to have been rare at this site.

In contrast, the frequency of structures associated with beverage storage at Backside Church Street slightly corresponds that found in the Chesapeake. This is largely due to the presence of non-German immigrant *Bullsmen* in Barbados<sup>14</sup>, bottles recovered from the Backside Church Street site. In the mid seventeenth century, Cologne and Probst were centers of the German wine and beer industries and *Bullsmen* came primarily from these two districts. In fact, one of the *Bullsmen* recovered from Backside Church Street appears to have the modification of the arms of the city of Cologne marked on its bottom only. *Bullsmen* came in a variety of sizes and some could hold as much as five gallons (Neal House 1669-70; Wilkman 1987:72-76). The *Bullsmen* from Backside Church Street ranged in height from 8 to 14 inches and the larger ones could have certainly held more than a gallon. The more stylized and roughly finished have suggest that the majority of them may have been later variants from Probst (Neal House 1669-70; Wilkman 1987:75-76). Two-hand 1600s items in their modified and modifications just below the base which helped date the site.

However, the emphasis on ceramic bottles within beverage storage category is misleading. In the seventeenth century, glass glass wine and gin bottles, excluded from ceramic foodware studies in the Chesapeake, functioned equally well – and perhaps even frequently, as beverage storage containers, incorporating glass bottles into the equation at Jamestown structure 112 and Backside Church Street, greatly altering the functional pattern based on wine and wine fragments. Jamestown structure 112 contained 23 green glass wine and gin bottles, as well as 1 complete large-mouthed green glass bottle. Backside Church Street yielded only 8 green glass wine and gin bottles. When glass bottles are added to the beverage storage category and averaged into the overall foodware assemblages from the two sites, the percentage of ceramic and glass items used in beverage storage increases to 36% at Backside Church Street and to 76% at Jamestown structure 112 (Table 15.2).

The ceramic and glass bottle evidence reveals more than simply a different emphasis on beverage storage at the two sites. The differences may also indicate a greater economic and preference for ceramic beverage storage containers at Backside Church Street. As mentioned earlier, the heavy concentration of shell context at Backside Church Street likely reflects the influence of Dutch workers and traders in seventeenth-century Backside. The same argument can also help explain the consistency of numerous Bellarmine bottles. According to research by Susan Charlotte Williams (1987:32), “High on the list of foreign goods desired by Dutch trading vessels in the early seventeenth-century was tinware with glazed stoneware.” Moreover, Dennis Bellarmine had been popular in England since the sixteenth century. In the mid-seventeenth century, the Dutch Navigation Acts, which were aimed at reducing Dutch influence in the maritime trade, placed a high restriction on Dutch exports to England. Although ceramic wine bottles among the restricted items “Glass bottles and jugs” were exempted (Siedel House 1668:146).

Early Atlantic maritime trade Bellarmine were primarily used for shipping European wine and spirits (Williams 1987:32). There was a substantial trade in European alcoholic beverages in Backside. For example, Ligon wrote,

brought to us from other parts of the world – good English from France and Spanish Wines – with others – some from the Molatoes, some from India, some of the Islands of the Indies – from England, Spain, some of America (especially gin), some of West, some of Warrmed (especially chocolate) &c. and East-India, Finally, which is almost strong

(Lapin 1837: 10)

In 1702, Reverend Bakenham (1702: 8–10) estimated that Barbados imported more than 640,000 worth of alcoholic beverages – including wine, brandy, beer, etc., and cider, which represented nearly 17% of the value of all imports to Europe. Dutch merchants controlled much of the European wine and brandy trade (Visser 1994: 236–237). The Dutch also profited greatly. The strong demand for European alcoholic beverages and the central position of Barbados in seventeenth century Barbados helps explain the high number of Bellarmine bottles on Barbados Church Street. Further, the size and durability of numerous Bellarmine probably made them more desirable than smaller and more fragile glass glass wine and gin bottles. Once imported European-style systems, Bellarmine were probably used for a variety of alcoholic and non-alcoholic beverages.

Trostch argued that the popularity of food-distribution networks increased in the seventeenth century in order to help meet the growing desire to reproduce the proportions of food/beverage consumption. The proportion of networks associated with food distribution on Barbados Church Street corresponds with patterns found in the Chesapeake. At Barbados Church Street, beer, brandy, and large ciders, often in decorated bottles, such as bell and Mark Devereux bottles, dominated this category of ceramics.

The Barbados Church Street site had a high number of vessels associated with food consumption. In order to understand patterns of food consumption, archaeologists have generally investigated the proportional relationship between ceramics associated with food and beverage consumption. Maximum-entropy vessel counts from excavations illustrate a 0.2 ratio of beverage consumption to food consumption across sites of 1:0.1. The low Chesapeake sites examined by Trostch showed a similar pattern and produced a ratio of a single food-related ceramic ratio of 1:5.1. However, a visitation from Barbados

Church Street reveals a death-and-venison rate of only 1.1 (slightly more food consumption venison vessels than beverage consumption venison vessels) (Table 15.2).

Table 15.2. Beverage consumption/Pipe/consumption

Burkhead Church Street	0.01
Dispersed plantations	0.01
Chelmsford England	0.9-6
Cleft-plantation phase I	1.2-8
Antipope's structure 110	1.01
Van Sweringen	1.01
Cleft-plantation phase II	2.01

In Plymouth, Massachusetts, Davis argued that the increasing number of ceramic drinking vessels in the second half of the seventeenth century was "an index of a more formalized and sophisticated dining setting." Ultimately, Davis characterized individual footways in the third phase (1700-1800) by a larger, or at least equal, number of ceramic plates in ceramic drinking vessels. Based on Davis's account of individualism footways, the evidence from Burkhead Church Street suggests that an individualistic footway pattern existed at Burkhead nearly a century earlier than it had occurred in Plymouth. It was also more individualistic than that found at the Chesapeake, except in the Dispersed plantations, forms of the wealthy-colonial presence. However, it was slightly more individualistic than the mid- to late seventeenth century domestic use occurred in Chelmsford, England presumably where such vessels should appear first (Yonck 1990:52). In fact, the Burkhead Church Street pattern was closer to that found by Kennedy et al. (1982) and Stone (1988) in the Chesapeake probate inventories, yet without considering evidence of the widespread use of pewter barware, if the ceramic assemblage at Burkhead Church Street is typical of footways in England in the mid- to late seventeenth century, Massachusetts would have been using less individual ceramic plates and sharing ceramic cups and mugs.

However, as Kennedy et al. (1982:23) and Stone (1988:74-75) explained, not ceramic evidence alone demonstrates important role of silver, pewter, leather, and wood vessels. Vessels made from these materials played a major role in British colonial footways, but, due to decomposition and/or recycling practices, are rarely recovered from archaeological sites. The limited known and small number of vessels may have diminished the importance of

wood and leather vessels in Barbados. Cowrie was almost certainly used as drinking vessels, but may have been particularly associated with plantation slaves rather than European colonists at urban households or taverns (Phipps, 1992: 97). Based on evidence from the Chesapeake probate inventories, Drenth et al. (1983: 22) and Stone (1988: 70) stressed the use of pewter and silver vessels. As in the Chesapeake, coffers in Barbados were also strong and lacking from pewter and silver (see Ligon, 1657: 46/47). Moreover, there are a handful of seventeenth-century probate inventories for Barbados, which, although the limited number is statistically significant, reveal the widespread use of pewter vessels (Figure 15-2).

1653, Captain Thomas Darnall's Inventory

In the kitchen: One silver bottle, 3 Brass Kettles, 1 Iron pot, 1 Brass Skillett, 1 pew-Cole-bron, and Spitt, 2 Pewter dishes, 7 Pewters, 7 spoons, 2 Salt Cellars, 4 Pewter Plates, 1 Pewter Jugge, one silver water pottle, 1 Silver Tiddle, 2 Silver Knives, 2 Silver spoons, one great knife, one small knife, one Brass Candle, one Iron halving stone, one pair of Scales, 2 milk bewies, 1 Cheese, 4 Stone Juggs, 4 Stone Milk Pans, One Press,

1656, William Yates's Inventory, Captain's Lodge

One Pewter Kettle, Nine Pewter Plates, Two Iron Pewter Troughs, Two Pewter Basins, One Pewter Spoon, One Pewter Trough, Three Pewter Candlesticks, One pewter Salt, One Iron Chopping Pan, One Iron Peeking Pan, One Cheese Turnstone, Two jugs, Twenty three glass Bowles, Two Iron pewter Bowles, One pewter hand pan, Two glass jars, One watering pot, Six Iron Pots, Two Iron Skillets, One Iron Chafin dish, One Silver Mallet, One Copper Kettle, One Brass Iron Pot, One Brass Kettle, One Pewter glass, One Candle (candle)/Cress, Two great washing trays

Figure 15-2. Food and beverage vessels in seventeenth-century Barbados inventories in the Ligon manuscripts (HMB, 1956)

If pewter was prevalent in Barbados as the Figure 15-2 inventories suggest, then why were so many ceramic plates found at Blackhead Church? Short? In the mid- to late seventeenth century, the sugar industry made Barbados "one of the richest spots of ground in the world" (Wickham 1699 cited in Dunn 1973: 77). The wealth generated by sugar pulled ships to Barbados like magnets and turned Blackheads into a busy trading hub trading with merchants and seamen. In the late 1640s, Ligon wrote "Almost a hundred sail of ships yearly visit this Island." That number more than doubled with the full-scale shift to sugar trading in the following decade (Dunn 1973: 209). In 1697, Barbados accounted for 40% of England's exports to the Caribbean (Coleman 1986: 5-6). In 1698, Barbados

exported to England (consolidation valued at an annual average of £214,388 while Maryland and Virginia together exported an annual average of only £235,388 (Dean 1871:309-327). Moreover, the demand for slaves on American plantations derived European traders to the West and West Central African coasts. The high demand for slaves in Barbados and the favorable wind and ocean currents in the southeast Atlantic made Barbados, rather than the Chesapeake, one of the first stops for British and French ships and gave Barbadians a privileged position in the Atlantic trade.

Free men Barbados evolved from Barbadian metropolitan culture. The great potential for wealth brought waves of English gentry to Barbados, especially those seeking refuge from political turmoil at home. In the mid seventeenth century, many Marylanders escaped civil war in England by fleeing to Barbados. These men represent brought with them considerable wealth and substantial landholdings. Moreover, the huge revenues generated by sugar led to considerable back and forth travel between England and Barbados, which facilitated the constant flow of metropolitan ideas. Bridgetown was a doorway for the earnings and gangs of English gentry who brought with them a taste for the most stylish goods. Although not part of the planter class, merchants, ministers, and many other residents of Bridgetown, including the residents of Blackwell Church Street, benefited from trade patterns and the strong Barbadian economy and adopted elite patterns of social display. They emulated the consumer behavior of wealthy English landowners and demanded fashionable attire—especially cloth plates. Nearly all (32%) of the women Burrows measured from Blackwell Church Street was debt.

In Plymouth, Davis argued that Africans in their economic freedom remained and mostly used women plates, except for decorative hairpins. According to Davis, Africans displayed few decorative plates in favor of expensive powder. Unlike Chesapeake plantation owners, Davis (1986:75) found that “powder was the most important material for Africans” and that there was an “almost complete absence of cosmetic adornments.” Rowley et al. (1981:10) discovered a similar lack of cosmetic adornment and noted that

*Chenopodium rubrum* is typically an off-white plant, “duller and sarser, scarcely at all inclined to this same pattern” (as John Evelyn supported with citations from New England as well).<sup>17</sup> Ann Smart Morris (1985) examined the role of power in eighteenth-century English protein consumption and found that the use of protein-richness was nearly universal, but that wealthier households tended to use both protein and fat sources abundantly. In fact, Morris (Morris 1985: 30–31) discovered “It is only on the top of the economic scale that ornate plates substituted protein ones.” Although protein was most expensive, it was abundant and lacked visible decoration. In contrast, fat sources abundantly were highly and could be highly decorated, which, according to Morris, “differentiated status groups and popularity.” Morris claimed that fat sources abundantly put the dining table into fashionable during previous and was especially popular among those in urban areas. Similarly, Yarnick (1990: 40) concluded, in the late seventeenth and early eighteenth centuries, debt was more popular than power among the wealthy and prosperous households in the Chesapeake. This probably explains the relatively high proportion of ornate food-consumption records at the Documentary site.

The percentage of ornate food consumption records at Backside Church Street, especially debt, supported those of all the Chesapeake sites had indicated that the same forces were at work in Backstone. Debt patterns often gave individuals the first chance of income and the economic wealth generated by debt allowed them to purchase expensive and delicious foodstuffs. The constant influx of wealthy English migrants and returning Barbadians evidently spurred the adoption of fooding ornate styles typical of those used by individuals in cities in contemporary England, including the emphasis on fat sources. The dominance of Dutch tastes increased the potential availability of debt income. The cultural influence of wealthy Dutch planters and merchants may have also increased the Barbadians’ specific desire for debt.

In contrast, reliance on the Chesapeake food within more limited means. By the nineteenth had shifted north in the Chesapeake, many of the most fashionable goods had



from sold to the wealthy Barbados planters and Englishmen merchants. After the fall of tobacco prices in the 1630s and 60s, the Jamestown became a white only sleepy backwater. Jamestown was a capital city, yet it never had more than one hundred permanent residents, and the majority of the Chesapeake colonists were involved in small widely dispersed tobacco farms. Richard Hakluyt, Cary Carson, and William Claiborne (1603) pointed out that Jamestown was little more than a "poor village."<sup>10</sup> There was simply not enough capital available for Jamestown colonies to purchase expensive resources from French and Dutch colonies and their chains of commerce was frequently limited by the scattered waters remaining off coastal Caribbean trading routes. Although they tried to maintain metropolitan foodway patterns, availability and cost prevented most colonies from consisting of food-cashable metropolitan goods. Further north on the trade chain was Plymouth. Rural colonies there were further removed from metropolitan influence. They developed a more individual and conservative pattern of foodways. However, merchants in New England port towns like Boston and Charleston, Massachusetts were most likely to adopt food-cashable foodway styles and there is evidence in foodway remains assemblages occurred from rural sites in those other New England centers (Brooklynsaid in Goodwin 1999:137, Goodwin 1999:137, Minnesota 1984, Probert 1993).

Minority remains reveal events from the soil. In late seventeenth century Barbados Church Sites are reveal foodway patterns different from those identified in British colonial sites in the Chesapeake and Plymouth. The Barbados evidence suggests that a consumer based on trade patterns, purchasing power, and the constant reinforcement of metropolitan sites is more appropriate for understanding British colonial foodways in the Americas than a model based on the economical/individual preference. The wealth generated by sugar allowed Barbadians to adopt food-cashable and more individual looking style of foodways a century before colonists in Plymouth. This food-cashable foodway pattern, one that Yonish called "wealthy," also occurred in Barbados decades earlier than it did in the Chesapeake. Moreover, these British foodway trends cannot be seen in an Anglo context

vacuous Dutch migrants and visitors clearly had a strong influence on the demand and availability of various goods in the British-Antislav world.

### *Alcohol, Anxiety, and Antislavery*

In 1983, anthropologist Donald Horowitz argued that visitors experiencing high levels of anxiety drank excessively. Horowitz believed drinking functioned contemporarily to relieve anxiety. The unpredictability of life as the colonial frontier led to high rates of alcohol use in Barbados and the Chesapeake, for instance, fear of tainted water, the strenuous diet of high fat and heavily sweetened foods, folk beliefs about medicine, and the pursuit of Old World drinking habits further opened the doors for alcoholic stimulation. However, a comparative look at rumour and glass drinking material from Barbados suggests that visitors to Barbados, unlike their counterparts in the Chesapeake, fully endorsed the socialisation of drinking and pursued fashionable drinking performances similar to those pursued by contemporary elites in England. The widespread availability of alcohol, the frequency of visitation routines, and the elite networks of alcohol-based hospitality enhanced the Barbadians' special preoccupation with alcoholic drinking and elevated rumour to central level. Alcoholic drinking became a popular pastime in Barbados and the wealth generated by rumour as well as the influence of Dutch visitors made invisible drinking performances possible. The model developed in the archaeological study explores the role of alcohol within the context of British colonial landscapes and emphasises social group, rather than individual, drinking patterns. This evidence reinforces the argument that Barbadians adopted fashionable landscapes rather than their North American counterparts and reveals distinct alcoholic responses to anxiety in different parts of the British Atlantic world.

Unlike Chesapeake materialism, Barbados studies in historical archaeology often focus on the role of rumour and ignore the role of glass in eating and drinking patterns. Because alcoholic beverages are often recovered from and stored in glass vessels, the emphasis on rumour has led many archaeologists to overlook patterns of alcohol use

While I have examined the archaeological evidence for beverage consumption within the context of French colonial foodways at Buckle Church Street, it is now necessary to investigate the particular uses of alcohol use. Comparative evidence from Jamestown structure 115 helps form the basis of this study and Yarbark's (1990) temporal model of early foodways also remains a key facet of this investigation.

Bottle, mug, peach bowl, cup, and wine glass are alcohol drinking at both Buckle Church Street and Jamestown structure 115. Although the archaeological evidence cannot confirm that these items were used exclusively for alcoholic beverages, the historical and social context of these two sites suggest that they were served alcoholic purposes. In the seventeenth century, rum-drinking was central to the Barbadian economy and large amounts of rum were available to Barbadian colonists. Barbadians absorbed rum to a wide variety of other locally made and imported alcoholic beverages. In the Chesapeake, colonists imported large amounts of rum from the Caribbean and wine from Mexico. They also brewed beer and experimented with distilling (Cotter 1994: 47–54; and King 1994, Neal 1994: 102).

Table 11.1. Functional categories including glassware

Functional ceramic category	Buckle Church Street %	Jamestown Structure 115 %
Food preparation and storage	11.0% (26)	11.5% (26)
Food distribution	62.0% (14)	6.0% (15)
Food consumption	16.3% (38)	82.0% (19)
Subtotal	49.3%	49.5%
Beverage storage	16.0% (37)	33.3% (38)
Beverage distribution	21.4% (50)	7% (8)
Beverage consumption	19.3% (45)	48% (11)
Subtotal	56.7%	54.3%
Total	100%	100%

\*Includes glass bottles \*\*Includes wine glasses

Backside Church Street and Lanesdown structure 115 represent two distinct British colonies at opposite ends of the emerging Atlantic world, yet, when glass bottles and wine glasses are incorporated into the assemblages we find an almost identical ratio of vessels associated with food and beverage use (Table 10.3). At Backside Church Street, 31.1% of all Ewberry excavated and glass vessels were associated with beverages and 47.3% with food. At Lanesdown structure 115, the proportion was 34.2% and 43.2% respectively. The traditional emphasis on food and beverage remains dominates the material culture of glass at Ewberry generally and appears to have marked similar trends.

Table 10.3. *Excavated drinking vessel counts*

Vessel	Backside Church Street	Lanesdown structure 115
Glass Cup	4	3
Glass Mug	7	2
Pewabic Cup	1	-
Pewabic Mug	1	-
Stoneware Mug	4	5
Lead-glazed Earthenware Mug	2	-
Wine Glass	1	3

Despite the similar ratio of food to beverage vessels at the two sites, a closer look at the assemblages reveals distinct differences, especially in terms of drinking (Table 10-4). Of the 28 ceramic drinking vessels found at Backside Church Street, 7 were cups and 14 were mugs. At Lanesdown structure 115, there was only 1 cup and 8 mugs. Mugs generally had a greater capacity than cups and had at least one rim, rather than stem and spout, construction. Unlike colonies at Barbados, colonisation at Lanesdown operated a brewery as the main source of alcoholic beverage (Coxon 1994). Ceramic drinking vessels represented 15% of the total ceramic vessel assemblage at both Backside Church Street and Lanesdown structure 115. At Backside Church Street, 10% of ceramic drinking vessels were stoneware and 42% were debt. The high concentration of debt is consistent with other ceramic finds recovered from Backside Church Street. All of the cups were made of debt and mugs were divided between debt, Westwood stoneware, porcelain and two, possibly Dutch, examples of lead-glazed earthenware. At Lanesdown structure 115 50% of

common drinking vessels were wineglasses and MBE were stills. Structures 115 contained 3 wine glasses while only 1 was recovered from Backside Church Street.

Differences in drinking patterns between Backside Church Street and Janssenvoort structures 115 are best processed in the category of green glass wine and gas bottles (Table 15-3). At Janssenvoort structure 115, there were 23 green glass wine and gas bottles as well as 1 large-mouth green glass bottle. Clear bottles represented 22% of all common and glass foodway vessels at Janssenvoort. At Backside Church Street, green glass wine and gas bottles represented only about 5% of all common and glass foodway vessels. The high concentration of green glass wine and gas bottles is not unusual at Janssenvoort. For example, Coffey (1988:43-47) recovered more than 300 green glass wine and gas bottles from Janssenvoort structures 11A, and 19B, which had investigations in contemporary sites as a tavern (see also Baughman 1989:90-91; McCannery II 1988:140).

Table 15.3. Most common bottle counts

Yard	Backside Church Street	Janssenvoort Structure 115
Green Glass Wine and Gas Bottle	8	23
Large Mouth Green Glass Bottle		1
Wineglasses Bottle	6	5
Clear Janssenvoort Bottle	1	
Squallike Bottle	3	
Orange Jar/Wineglasses Bottle	1	
North Devon Glass Jar/Wine or Bottle	1	

Given the high proportion of green glass wine and gas bottles at Janssenvoort suggest that colonists were drinking green glass bottles? Archaeological evidence is not able position to effectively determine whether bottles were commonly employed as an alternative to mugs, cups, and plates; however, when green glass wine and gas bottles are additive the maximum vessel counts for sites of drinking vessels to-flavor glass at Janssenvoort structure 115 jumps from 12 (1 bottle) and problems what Deder would call a more common pattern of eating and more food pattern of drinking similar to their food and/or restaurants century Plymouth. If bottles were typically used for foodways, then the evidence challenges. Brandy et al. (1982:23) and Store's (1982:75-76) suggest that, in the Chesapeake, drinking was a "corporate" activity. Evidence from Backside Church

Seven reveals a last dramatic change: incorporating bottle glass into the equation increases the drink to eat mix from 1:1 to 1:1. Thus, the very go-to mix was produced by the addition of bottles into the fundamental category of beverage containers found at Backside Church Street virtually throughout the segment that, at the end, is the seventeenth century. Bartholomew had already adopted individualistic eating and drinking practices.

Most of the numerous Bellarmine bottles recovered from Backside Church Street were too large for individual consumption and most have been used to store beverages. Only one quart-sized Bellarmine was small enough and light enough to have been suitable as a drinking vessel. The relative scarcity of green glass wine and gin bottles and the large number of common storage bottles at Backside Church Street suggest that alcoholic beverages were being consumed primarily from mugs, cups, and glasses. In contrast, the evidence from Jamestown structure 111 suggests glass bottles may have played a more prominent role in Chesapeake foodways. If green glass wine and/or gin bottles were used primarily as storage containers at Jamestown structure 111 then we might expect to find equally high numbers of mugs, cups, and glasses. We do not see, therefore, it is possible that drinking from bottles was more regularly practiced at structure 111 than at Backside Church Street.

In England, bottles were more likely to be made of brown and/or amberware while, at Jamestown, green glass wine and gin bottles were predominant. Although Jamestown had two glass houses in the early seventeenth century there is no indication that they were successful operations or that they produced bottles for local use (Harrington 1992:31–34). Perhaps the glass bottles recovered from Jamestown structure 111 were made up Britain and initially used to transport/Carry and Marston wines to Virginia (Harrison 1996, Pritchett 1999). The evidence from Jamestown suggests a greater access to or preference for glass bottles. In contrast, the large number of numerous Bellarmine bottles at Backside Church Street indicates the consumption of different types of imported alcoholic beverages (Harrison 1987:76). The Church-controlled stock of the European wine

and broadly made and the Dutch influence in Barbados suggests that Barbadian colonists would have had greater access to European wine and beer, especially from Germany and France. However, the higher number of miniature Belemmers or Barbede Church Spots may simply reflect a preference for large and sturdy Belemmers bottles over small and fragile glass bottles. The Barbadian privileged position in the Adams's trade-matrix access to Belemmers bottle patterns.

Yonick's study of footery customs established a functional group of customs known as "low-divergent" and it is especially important for understanding patterns of alcohol use. That functional category included customs associated with *pusch* drinking, a folkloric drinking performance that emerged among slaves in Britain and the Dutch colonies in the mid- to mid-seventeenth century. The presence of *pusch* drinking was a key element of Yonick's overall argument that British colonial landscapes in the late seventeenth-century Chesapeake were changing from a "folk" to a "country" tradition. According to Yonick, the increasing use of customs associated with *pusch* drinking revealed the colonists' emulation of the folkloric drinking behaviors of native peoples (16). Based on the evidence from the Chesapeake, the shift occurred in the late seventeenth century and is first apparent in the Van Swearingen (1672-1700) and Deanevald (1680-1700). *Pusch* bottles were also recovered from Jamestown (1680-1700) (170).

Yonick (1990) claimed that *pusch*-drinking was first introduced from India to the HCBs, but it is clearly being practiced in Barbados in the 1680s. Ligon (1657: 22) wrote "Pusch" is made of water well mixed together which makes Ligon drinking will be very strong and like belemmers." Ligon's description of *pusch* is typical of the European rope cane brandy drinks known as grappa in the French Caribbean and *grogue*, in the Spanish Caribbean. Ligon never tasted *pusch* and appears to have mistaken it for what he called *grappe* (Cronin 1957). In 1661, shortly after Ligon, a Swiss medical doctor in Barbados named Felix Sporn (1661 cited in Fendley and Gough 1967: 10) wrote,

"Punch is prepared with beer and made is drunk." According to *Historical Sketches of Connecticut* (1857) where punch is thought to have its East Indian origin and may derive from the Hindostani word, *punch*, meaning fire, for the fire ingredients used in punch. If punch has its East Indian origin, then it is possible that Dutch settlers, who interactively engaged in the East Indian trade in the mid seventeenth century, introduced the name directly, or indirectly via language into Barbados.

Punch was a special variety of mixed drink made well up in America (ale, spirit, sugar and water). In the seventeenth century, there were variations on ingredients. Spaul (1881) cited in *Hamlin and Goodell* (1902: 52) were punch "formerly the following manner: one talent a pound of wine and sweeten it with sugar, then lemon juice, and finally the above mentioned Koll (Dew) brand or Brandy." In *Martinsique*, French missionary Jean Baptiste Lahaie (1724) (136-136), wrote "punch was the favorite drink" of the island and it was made with two parts rum, one part water and sixteenths sugar, cinnamon, and powdered cloves, mixing a slice of lemongrass or slightly burnt lemon, and egg yolk. In the early eighteenth century, *Historical Sketches of Connecticut* (1796) (34) indicated that punch was made with "Lemon, double refined sugar, Spring Water, and single French Brandy." Although French brandy was widely used as punch, *Historians* wrote: "The good Housewife of Barbados can then own Massachusetts Rum." The term *claret* also signified the punch and, thus, for example, punch made with rum was sometimes specifically referred to as "rum punch."

However, punch was really just one of a wide variety of mixed drinks. Two other mixed drinks, *sangrove* and *English lemonade* were also popular in the seventeenth century. According to Lahaie (1724) (135-136), *sangrove* was made of "Maiden wort which is placed in a kind of glass or earthenware with sugar, laid on lemon juice a little cinnamon, and powdered cloves, plenty of nutmeg and a slice of lemongrass, drink slightly burnt." *Sangrove* contained the same ingredients as punch, except that lemons were substituted for egg yolk. *English lemonade* was made with Canary wine, lemon or lemon



juice, cinnamon, nutmeg, cloves, and essence of roses. According to Laker, English domestic wine "delicious, but dangerous."<sup>17</sup>

In the late seventeenth and early eighteenth centuries, there is some confusion over the exact meaning of punch. Physician and writer Sir Hans Sloane (1707) noted: "The common drinking liquor of the more ordinary sort is Ruse punch." Sloane's reference to "the more ordinary sort" suggests that he associated it with poorer classes. As late as 1780, *James's newspaper* (later *Charles Lister* [1740-50]) failed to distinguish between rum punch and common distilled rum or "infernal" called a *hell drink*. And, in 1790, *Bartholin's newspaper* (later *Carlisle Hughes* [1790-94-96]) also associated punch with "infernal rum." However, while ordinary rum may have been generally considered the drink of poorer classes, rum punch, which was distinguished by the careful proportion and addition of exotic and expensive ingredients, was no cheap drink. In the early eighteenth century, the distinction between rum punch and common *hell drink* rum became highly obvious in terms of its link to elite drinking. *Chubbuck* (1731-38) believed "the more magnanimous People entertain one another with Punch made of the best ingredients." According to *James's newspaper* (later *Edward Long*)

Punch seems almost parcelled from the polite tables; though, when it is made with rum of the age, the best, and not too strong, is very pleasant, refreshing, and wholesome drink, and one of the best appropriated to a hot climate.  
(Long, 1774, II: 266-267)

The early availability of rum and occasional difficulty procuring imported beverages meant that all classes in Barbados consumed rum. However, even though both wealthy and poor consumed rum, the upper classes still needed to distinguish their drinking patterns from the poor. As with the simple addition of a dash of sugar and between rum and common whisky once cooked, the simple addition of exotic ingredients turned ordinary rum into an expensive elite drink called punch.

The proliferation of punch reduced the elite meaning of punch drinking performances. Whisky-consuming in the Caribbean prospered and diversified as a result of

pitch or punch bowls. According to Lohs, songster was made of “thickest ware, which is glazed on a bowl of glass or earthenware.” In Barbados, elementary bowls were covered with “a heavy bowl of rum punch” (Strickland 1710). According to Crowley, a punch bowl is:

A hemispherical vessel with a plain rim. Punch bowls were in various earthenware, stoneware, and porcelain. They range in capacity from 1/2 pt to several gallons. The smallest ones were used by individuals for drinking punch and perhaps eating some solid foods. The larger ones were used for serving and serving punch.

(Crowley 1983:10)

Unlike punch bowls, other serving bowls were volcanic vessels that usually lacked radial decoration. In Barbados and the Chesapeake, stoneware-serving bowls were typically plain or had glaze-fired earthenware used for handles and insulating surfaces. Bowls, which had rounded (not otherwise processed) rims, also differed from punch bowls. Bowls were probably used for washing, stirring, and dining (Crowley 1983:10). In the seventeenth century, ceramic punch bowls, especially drifts and porcelain versions, attained the appearance of refinement similar to that of English tea sets in the late-eighteenth century. Punch drinking events, as well as ceremonies, created the impression of wealth, power, and stability throughout the British colonial world.

Table 18.1 reveals that residents at Backlot Church Street possessed an especially large proportion of punchbowls. Although we recovered no complete punch bowls from Backlot Church Street, it was possible to estimate the depth and diameter of some of the punch bowls from fragments. Most of the punchbowls were small. One nearly-complete fragment vessel had a diameter of about 18 cm and was 8 cm deep. A punch bowl of this size could easily hold a quart (Figure 18.5). Several drift varieties had diameters of between 16 and 18 cm, but it is not possible to determine the capacity without knowing the depth of these vessels. Seventeenth-century punch bowls were smaller vessels than ones produced in the Chesapeake period, which sometimes hold as much as two gallons (Crowell 1987). The small size of early punch bowls probably reflects the limited availability of

peach marking significant in the seventeenth century. For example, tobacco-peach bowls increased in use over the course of the seventeenth century as the availability of tobacco diminished and the price of tobacco fell. Small peach bowls, as with small tobacco bowls, probably also reflect the severity of peach drinking in the seventeenth century. In addition, smaller peach bowls might indicate that they were, as Bentley et al. suggest, most likely to serve the dual function of food consumption vessel as well as a peach bowl.

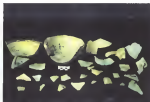


Figure 13.3. Spanish-peach bowl from Buckle Church Street

Peach bowls appear earlier at Buckle Church Street than they do at either the Chesapeake. The Yaw (Seventeenth and Eighteenth) were among the earliest ceramics identified by Torrence in the Chesapeake to have peach bowls. Peach bowls are also present at Powhatan structures 112 (Chesapeake) and the Yaw (Seventeenth and Eighteenth) structures 115 and the Eighteenth were slightly more than a decade later than Context 111 of the Buckle Church street site, which they have been dated as early as the 1680s (Bentley et al.

records: Backside Church Street was likely a domestic dwelling in one of the poorer sections of Bridgetown. In contrast, the Van Sweringen site appeared to be an interesting part of an expansive and diversified plantation machine in a wealthy colonial province. Yet, punch bowls still represented a much greater proportion of factory-variant records at Backside Church Street (Table 15.1). Thus, the evidence suggests that punch-drinking began earlier and was more widespread in Bridgetown than in the Chesapeake.

Archaeologists have used the presence of punch bowls at sites in North America and the Caribbean to indicate the rise (and/or decline) of slavery (Bassett et al. 2006: 123; Flenner et al. 1986: 17; Gaudreau 1989: 121; Green 1984; Lamb 1988: 37; Pickens 1999: 45; Skowronski 1984: 43; Watson and Nicholson 1983: 228). Pottery inventories also show the transition between punch drinking and wealth. For example, the 1722 inventory of John Pinney, a sugar planter in Peru, included a porcelain punch bowl (Cowan 1977: 10). One explanation for the presence punch bowls in Barbados and the Chesapeake is that elite colonists used punch drinking as a way to signal identity as the Caribbean frontier. The wealthy elite in seventeenth-century British America consumed fancy varieties of punch from expensive and stylish drinking bowls. The wealth difference in the preparation of rum and Madeira was so changed that growing from common drinks of molasses, water, and lemon to drinks of the elite. Moreover, the presentation of punch at estate bowls changed drinking from an ordinary activity able to elite social performance. These drinking bowls circulated among elites in Britain and the British colonies. However, to judge from the few evidence from Backside Church Street, the practice was not necessarily restricted to elites.

The relatively high number of punch bowls recovered from Backside Church Street reveals an important aspect of seventeenth-century Barbadian society: that Barbadians placed a heavy emphasis on hospitality and the exclusive art of drinking. In 1688, Henry Mordaunt noted in Davis (1971: 75) a visitor to Barbados wrote, "The people have a very generous custom that if one comes to a house to inquire the way to any place they will

make him drunk." Ligon (1837: 57) wrote that Barbadian planters were "Gentlemen" because of their "Civility extending to strangers." In 1835, Oliver Schreiner listed as Barbados (1835: 44), the location of a meeting Barbadian sugar planter wrote, "For the many planters, or freemen, to give him a character, I can call him one otherwise than a German for his drinking, and a witless one for his welcome." And, according to Christopher Codrington, the governor of the Leeward Islands,

The planters [of Barbados] think the best way to make their strangers welcome, was neither to sit to wait drinking, like drunk past of that stinking liquor, which will make more the Mouth of our West Indians, who have looked like negroes, than certainly degrades a man - come to the other world

(cited in McCusker 1989: 247)

The desire to engage in alcohol based hospitality also permeated other parts of the British Caribbean. For example, in 1835, Jamaican sugar planter John Taylor (cited in Davis 1992: 271) wrote, "Nearly every Jamaican planter kept a lively bowl of rum punch ready to his table to amusecocked friends and visitors." Alcohol was social lubricant that invites humans to social interaction between friends and strangers.

The emphasis on alcohol based hospitality in Barbados was probably spurred by a variety of factors. In the 1840s and 50s, the civil war in England drove many refugees to Barbados. In order to ensure their rapid repatriation, the Barbadian Assembly attempted to stifle the spread of the conflict in the colony and hence, control, on the huge economic source of sugar making. The colonial Governor Philip Belk successfully maintained a neutral policy. Wealthy planters also ignored their political differences, Ligon wrote,

Living, friendly, and hospitable one to another, and though they are of several Parties again, yet, few disputes entered every thing as well, as there never was any falling out between them, which is general some of them of the better sort, make a Law amongst themselves, that whenever one of the worst Dissenters or Presbyter, should give to all those who lived here, a Glass and a Turkey, to be sure and those that visit the Indians, which sometimes was done purposely, that they might enjoy the company of our nation

(Ligon 1837: 57)

The plan worked, except for a short period during the early 1850s when a charismatic

*Republican and Emancipary* William passed control of the Barbadian Assembly and began

privately those who upheld the Parliamentary cause (Duffy 1988). However, there seems to have been considerable artistic, intellectual, political conflict and sectarian strife. Alcohol-based hospitality, as Legu-Stratford appears to have been a key element of that strategy and set the standard for all others to follow.

The constant flow of visitors, members, and other visitors to Exchequer increased the opportunity to engage in alcohol-based hospitality. In the seventeenth century, Exchequer was an active trading hub drawing hundreds of ships and thousands of its entry visitors each year. Exchequer had its reputation for hospitality and many visitors were overwhelmed by the welcome they received. In 1605, Lohat arrived in Exchequer and was immediately treated to dinner, drinks, and lodging. Lohat wrote (1792:107–110): “I was surprised by the kind manner in which I had been most cordially all I had been told about the country that very short of the mark.” Alcohol was central to that hospitality and, upon departure, Lohat wrote (1792:108): “you may rest assured that we did not leave Exchequer without having something to drink.” In 1796, a sixteen-year-old George Washington (1791–60) visited Exchequer and noted: “Hospitality and polite behaviour is shown to every gentleman stopped by the gentleman inhabitants.” Washington, who at the time was simply a young man on his third voyage, was treated to dinner and drinks at a variety of houses during his visit.

Exchequer considered hospitality a sign of wealth and prestige. The art of socially drinking, at the center of pseudo-drinking performances, was so deeply ingrained in the fabric of Exchequer hospitality that refusing to drink was disrespectful and a serious insult to gentlemen of Exchequer. Wheeler (1853 cited in Duffy 1982:77) claimed “If the member does they to stay to drink they take it very richly of him.” Silvester wrote,

[The phanton] takes a ill, if you pass by his door, and courtesy of liquor. I shall hardly miss a story of a gentleman when my coming. He comes to have himself on my feet, to make his way (shorter) express that phanton that was nearly left over with some, and yield by his house. The phanton arriving here tonight demands the reason of his phanton and the gentleman speaks from heart: phanton is often so much that way. The phanton has a phanton mentioned how what he would drink, he answered that nothing, in saying several stories which the man currently

proposed. The angry phisher after 2 or 3 years commanded his back the way he came for his security (so he turned it) for refuting his profit.

(*Letter to Harlow 1929-44*)

Refusing to admit challenges to the hegemony of gentlemanly status and men, as described by Schreier, it is more efficient to the lower-class men of Barbados.

Ceramic and glass vessels associated with beverage storage, distribution, and consumption made up slightly more than half of the fine-ware assemblages at Blackbird Church Street and Jamestown structures I B. The widespread use of alcohol in both colonies suggests that these vessels were commonly – if not primarily, used for alcoholic beverages. However, in contrast to Jamestown structure I B, the Blackbird Church Street exhibited a greater emphasis on the presentation, display, and possible act of drinking. Certainly, the presence of two self-contained vessels that could be used as a central element of late seventeenth-century barware. Perhaps passing a bottle among comrades in Jamestown was just as possible as dipping a salt cup into a punch bowl in Barbados. However, the greater number of punch bowls at Blackbird Church Street highlights the Barbadian preoccupation with an alcohol-based strategy of hospitality, which reinforced the act of socially drinking and gentlemanly status. However, the greater concentration of vessels at Barbados may have increased the social distinction that households and punch drinking appears to have helped create the social hierarchy and gentlemanly behavior.

In contrast, social class in Jamestown was more fluid. According to Chesapeake historian James Osgood (1994, 2003), “During the second half of the seventeenth century, most gentlemen after years of hard work had a standard of living fairly different from the lower levels of society in England.” These upward class distinctions in the Chesapeake were materially obvious, but even the wealthiest planters and merchants in Jamestown were probably not much better off than the poor in terms of material domestic comfort.

Both Blackbird Church Street and Jamestown structure I B possessed an almost equal percentage of ceramic and glass vessels associated with beverage use, yet differing portions of these two sites were devoted to the seventeenth-century residents of the colony

populated building just off Bridgetown granted numerous visitors. The large number of patent bottles recovered from Barbados Church Street attest to the importance of alcohol-based hospitality. In contrast, bottles may have played a more prominent role in the consumption of alcoholic beverages at Jamestown structure 113. The use of bottles suggests less interest in the social act of drinking and, possibly, a greater emphasis on solo drinking. The large number of bottles, therefore, may reflect a particular alcoholic response to the greater isolation and poorer material conditions encountered in the Chesapeake. However, solo drinking here is the descriptor alcoholic usage rather than necessity. Alcoholic historian William Kewbrew (1979) argued that, in the early American Republic, the solo-bottle was a psychological response to the stresses associated with rapid economic change and the frustration of not being able to live up to the American Revolutionary ideals of personal independence. The less variable pattern of drinking at Jamestown structure 113 may represent an alcoholic response to the stresses encountered by the more isolated and materially disadvantaged British colonies in the Chesapeake.

*Alcohol means a variety of needs.* The pursuit of sociability and the need to escape misery are two key functions of drink. The high percentage of ornamental glass bottles at Barbados Church Street suggests the former while the high percentage of utilitarian bottles at Jamestown structure 113 seems to reflect the latter. The focus on glass-bottleware materials has enhanced our understanding of alcohol use at these sites. Moreover, this comparative approach to alcohol has highlighted distinct preoccupations with sociability and misery in America in colonial-era and Great Britain. In the following survey, the British Caribbean emerges as the leading consumer in the Atlantic world and African slaves played a large role in defining drinking patterns in the region.



## CHAPTER 14 CONCLUSION

The high sucrose content of sugar cane makes it an ideal source for the production of alcoholic beverages. Some Old World societies explored its alcoholic potential. Sumerian texts, for example, indicate that fermented sugar cane-based alcoholic drinks were common in ancient India. In the 19th century, sugar cane cultivation emerged in the Levant and Mediterranean, yet the production of sugar cane-based alcoholic beverages waned. Prohibitions against alcohol in the Muslim world, the profitability of low-sucrose sugar, and the inefficiency of Mediterranean and Levantine sugar industries restrained interest in sugar cane-based alcohol. The rise of alcohol distillation in late medieval Europe gave new potential to sugar cane-based alcohol. European distillers used sugar as a secondary ingredient in their most popular and some even distilled cane, a by-product of sugar refining. However, due to the high price of sugar and the medieval emphasis on distillation, sugar cane failed to become the basis for a substantial alcoholic beverage industry.

In the nineteenth century, sugar production started in Hispaniola, Brazil, and Mexico and the production of fermented sugar cane-based alcoholic beverages intensified. Since, sugar is integral to certain traditional African drinking patterns, may have accelerated the initial experiments with fermented sugar cane-based alcoholic beverages in these regions. While sugar cooking struggled in Spanish America, it expanded in Brazil, especially in the northern province of Pernambuco. The distillation of cane probably

begin in western Brazil in the late sixteenth century – when it was encouraged by the impracticability of local material. However, the large-scale commercial production of rum led to event the Dutch capture of Pernambuco in the 1630s. The Dutch were leaders in alcohol distillation in Europe and probably spread the rum rum-making in western Brazil.

In the 1600s and 20s, the Portuguese named the Dutch from western Brazil. The Dutch reestablished their business in the struggling British and French Caribbean colonies, especially in Barbados and Martinique. The Dutch engineers brought capital, sugar-making equipment, and slaves, as well as advanced knowledge of rum distillation. In the early seventeenth period, British and French Caribbean colonies produced a variety of fermented alcoholic beverages from local resources and rum exploited the Dutch Indians' knowledge of alcohol making. Colonists used alcohol to cope with the many stresses they encountered on the Caribbean frontier. Yet, while rum making emerged to help meet the alcoholic demands of colonists, it quickly became a profitable export commodity.

In the seventeenth century, rum/brand markets of the margins of the Atlantic World – North and South America, Ireland, and Africa became primary destinations for Caribbean rum. Rum sales supplemented sugar plantation revenues and helped defray the cost of plantation expenses. However, regional markets remained the main destination for Caribbean rum. British and French traders, for example, sold rum to Canada in exchange for cotton and tobacco. The Caribs transported rum into their existing alcohol-based traditions, especially customs associated with spirituality and warfare.

In the eighteenth century, the art of rum making improved dramatically. Molasses, rather than steam, became the primary ingredient of wash-composition and sugar plantations increased the use of their mills. Jamaican and Barbadian distillers developed the most

implemented rum rations in this period, but they adopted two distinct approaches to rum making. Jamaican colonies produced highly concentrated rum, while Barbados produced low-concentrated rum and made the most of their limited resources. In the only other major study to address rum in the Caribbean, John McCusker (1999) constructed comprehensive models of rum production for each Caribbean colony in the period between 1764–1772. However, a new investigation shows that fixed models obscure the dynamic ecology of rum making and cannot account for the numerous variables that decreased rum profits.

Once rum improved its quality and profitability in the eighteenth century, it increased its demand for growth of rum making. Britain's Parliament saw rum as an ally in its war against foreign alcohol supplies and offered incentives to British Caribbean rum makers, including preferential trade status and rum contracts with the army and navy. By the mid-eighteenth century, Britain's rum imports surpassed those of European rivals. Highly concentrated rum from Jamaica found prominent place alongside gin in the British market. Distillers in Barbados dominated the North American alcohol market as they had since the seventeenth century. However, the American Revolution and the trade restrictions that followed the conflict had a devastating impact on Barbadian rum making, which never rebounded to its mid-eighteenth century levels.

Parliamentary incentives and strong Atlantic markets allowed British Caribbean rum makers to pull away from their French and Spanish Caribbean rivals. Above all, British Caribbean rum makers did not have to contend with powerful wine and brandy interests. In 1713, Louis XIV, with the support of French wine and brandy interests, instituted a prohibition that closed the French market to rum. The policy impeded the development of French Caribbean rum making, but French Caribbean rum still penetrated

(peripheral) markets in North and South America, Ireland, and Africa. Spanish Caribbean cane markets, on the other hand, suffered. In the seventeenth century, Spanish colonial officials feared the negative impact of cane production and use on colonial sugar revenues and social stability. In 1683, the Spanish Crown, spurred by Spanish wars and heavily indebted, outlawed cane making throughout Spanish America. The prohibitions forced Spanish Caribbean settlers into poverty.

In the nineteenth century, cane making spread to new sugar cane growing regions of the world. New cane colonies emerged in India, Africa, Asia, and the Indian Ocean colonies of Mauritius and Réunion. Cane making also began in the western British Caribbean colonies of Barbados, Grenada, Trinidad, Tobago, and St. Vincent. The abolition of the slave trade and the emancipation of Caribbean slaves increased labor costs and reduced the profitability of sugar making. Moreover, European sugar beet cultivation gained world sugar markets. As a result, cane production became a means of economic survival and Caribbean sugar planters channelled more and more money into their mill houses. In the mid nineteenth century, the Chilean and Philippine syndicates dominated European sugarbeet, which reduced the availability of cane and heavily and opened the door for French Caribbean cane makers. By the end of the nineteenth century, Mauritius was one of the world's leading cane makers.

In the twentieth century, Britain and France supplemented sugar and cane quotas to help subsidize their Caribbean colonies. However, Spanish Caribbean cane makers took the brunt in this period. The economic depression of sugar making in Cuba prevented abundant cane material for distilling. The Spanish American War and the professional U.S. trade duties that followed the conflict halted the growth of Cuban and Puerto Rican cane making. However, the Cuban Revolution ended Cuban access to the U.S. market,

The U.S. government, eager to prevent the spread of rumism in the Caribbean, implemented the Caribbean Rum Initiative (CRI) which offered incentives to Caribbean rum makers, especially in Puerto Rico and the Virgin Islands. As a result, Puerto Rico and the Virgin Islands are the two leading rum producers in the Caribbean and the United States is the main market for Caribbean rum.

The technological and economic development of rum production in the Caribbean also had profound impacts on the development of social patterns and behaviors in the region. The distribution study now helps us the way social groups in the Caribbean used different types of alcohol and developed distinct drinking patterns to help define social boundaries. Moreover, it explains the movement behind alcohol use. Following along the theoretical lines of anthropologist Donald Horne (1940), the level of society determined the consumption of particular social groups in the Caribbean. The unpredictable disease environment, the heterogeneous social divisions, and the extensive labor system provided plenty of reasons for colonists to seek alcoholic escape. However, other factors, such as stable kin networks and opportunities for social mobility, sometimes offset these reasons and encouraged abstinence. While alcohol may have offered a momentary sense of respite for some, excessive drinking also made certain groups and individuals vulnerable to abuse and illness. New light is shed on why some rum was so deadly and moderate others about as harmless local poisoning. *Reactive drinking*, the use of expensive ingredients and pure distilling techniques also increased the status of many Caribbean colonists, which served to exacerbate existing divisions. Drinking also played an important role in rituals of rebellion and provided a temporary shield with which to challenge the colonial social order. This is most evident in the use of alcohol by

Africans brought to the Caribbean as slaves. Some slaves used their farm-out periods, in fact, to turn their temporary release into an actual reversal of the existing social order.

Alcohol was at West and West Central Africa prior to the rise of European exploration in the fifteenth century. West and West Central Africans produced a variety of fermented alcoholic beverages from local resources, especially from palm sap and grains. In the seventeenth and eighteenth centuries, Africa became a primary destination for Caribbean rum. Rum played a major role in gift giving and helped fuel the slave and commodities trades. Africans valued the novelty of commercial-Caribbean rum and incorporated it into existing alcohol-based traditions. Rum, or palm palm wine, was used to help facilitate interaction with the spiritual and ancestral worlds. The fact that African slaves at the Caribbean produced rum probably enhanced its symbolic appeal.

If slaves were not already familiar with rum as Africans, they were quickly introduced to it upon reaching the Caribbean. Slaves acquired rum as part of plantation rations and through informal marketing systems. At the level of the lower economic stratum, West and West Central Africans shared similar beliefs about the spiritual role of alcohol and its ability to connect the spiritual and material worlds. Alcohol-based traditions crossed the Middle Passage and the continuum of slavery. A new analysis of slave alcohol use reveals that these beliefs merged in the slave economy of the Caribbean and alcohol became a universal substance for dealings with the supernatural. Slaves joined libations and made alcohol offerings at births, marriages, and funeral ceremonies. In addition, spiritual drinking strengthened social ties and integrated community members.

However, alcohol also had its darker side. While Caribbean rum production was increasing in the nineteenth and twentieth centuries, local consumption was on the decline. In the nineteenth century, Christian missionaries arrived in the Caribbean on large

numbers and offered a substitute to alcoholic images. They advocated temperance, abstinence, abstemious marital relations, and attacked African-oriented religious practices, many of which involved the spiritual use of alcohol. The evidence discussed in this dissertation provides new insights into the changing patterns of alcohol use and shows that reform movements were most successful in the British Caribbean, especially in Jamaica, which had one of the lowest per-capita rum consumption rates in the region. However, a new wave of Asian migrants added a fresh dimension to drinking in the Caribbean. In addition, many African-oriented religious practices survived and the weaknesses of temperance reformers and some groups continue to endorse the spiritual uses of alcohol. These traditions have followed the movement of Caribbean peoples to myriad non-racial communities abroad.

Historical archaeology has increased our understanding of alcohol and drinking in the past and revealed insights into issues of memory, health, foodways, trade, group identity, and the survival of Old World drinking habits in the Americas. Archaeological evidence from a mid- to late seventeenth-century domestic site on Barbados Church Street highlights a uniquely variable drinking pattern that emerged among British colonists in Barbados, Barbados. In contrast to British colonists who in the Chesapeake in the same period, Barbados Church Street contained a large number of refined middle-class parish bowls, which confirms the Barbadian colonist's access to alcohol-based sociability. The variable consumption of alcohol from parish bowls, rather than individual bottles, sheds new light on the way some Barbadians expressed identity, wealth, and solidarity as the empires of the British Atlantic world. The evidence also underscores Barbadian colonists' preoccupation with longevity and the home-based nature of drinking.

Moreover, the preponderance of debt remains types highlights the strong influence of South American, Indian, and religious or spiritually oriented Caribbean

Alcohol studies researchers have often overlooked the value of anthropological evidence. Although many anthropological discussions about alcohol and drinking are investigated by products of other research designs, anthropological evidence, such as that used in this study, has the potential to provide new insights into the role of alcohol in different historical and cross-cultural settings. The anthropological focus on alcohol and drinking in this discussion will, as I hope, advance the growth of alcohol studies.

At the start of the twenty-first century, rum is deeply embedded in the social fabric of Caribbean popular culture. In Cuba, rum drinking is widespread at family events and celebrations (Dance 1995: 184-1). In Jamaica, rum facilitates a successful Carnival dance (Bell 1989: 10). In Jamaica, rum is a fundamental ingredient of raggae *downers*.

Participation in the Big Drum Dance of Carriacou and *juke* dances in Montserrat also required large sums of money on rum. However, the centrality of rum in Caribbean popular culture is most evident during Trinidad Carnival.

The origin of Carnival in the Catholic tradition of Lent, Trinidad Carnival began as a private affair dominated by French Creoles who embraced Afro-Caribbean culture. However, after emancipation, the celebration was co-opted by Black Creoles who celebrated publicly (Barrow 1991: 198-200). During Carnival, Blacks joined the social order co-ordinated by listening the white Creole class. As with Antillean celebrations in Jamaica, Trinidad Carnival was a ritual of resistance against, with a Rastafarian style that included excessive rum drinking. In the first nineteenth century, several Trinidad Carnival celebrations ended in violent clashes between participants and colonial authorities. The reduced accountability associated with drunkenness acted as a shield against



confrontations. The violent unrest during Carnival has colonial overtones as imposed tight restrictions on the celebrations. According to Richard Barton (1982:303, 308), by the mid-twentieth century, Carnival had been “propped [and] as Dominican elections had been made more painful.” Though now drinking remains a central element of Carnival, it has been “introduced and modified for foreign consumption” as the need for tourist dollars has dulled the expression of Caribbean identity typically celebrated at Carnival time.

Other parts of the Caribbean have attempted to reach an economic dollar by replicating their own cultural traditions. Barbados Crop-Over is just such an event. First organized in 1873, Barbados Crop-Over adopted the Carnival flavor and repackaged it for foreign tourists and returning nationals. As with Trinidad Carnival, elected rulers in Barbados sponsor calypso troupes, masquerades, and Crop-Over Week. In Barbados, rum manufacturers Alfred Gay, Abubakar Cockburn, and J.B.A. Field, as well as the Bajan Hotel Company organize Crop-Over events, and advertisements for these events list the parade route.

Calypso music, with rum-drinking, are among the most prominent symbols of Caribbean identity and they merge in Carnival time. Although the lyrics of many calypso songs address political, social, and economic issues, rum drinking is a common theme in the lighter poems. For example, in 1953, calypsonian William Anthony published a song... which addresses the effects of too much rum during Carnival time.

One day I wake up feeling drunk  
 My head was like in the truck  
 My body was like on the hard stone ground  
 It was water in me when that got me down

(Anthony 1953)

The best known celebration of rum in place in Caribbean identity is the calypso song *Rum and Coca Cola*. According to musicologist Donald Hill (1980:234-240), the song

emerged in the 1940s and combined the melody of the late nineteenth century Martiniquaise song *L'Amie Pivote* and the lyrics of the French Tobaladian calypso artist Léon Janvier (*Rapet-Cadot*). The song was brought to the United States, where it was recorded for American audiences and recorded by the Andrews Sisters. Hall documented Léon Janvier's rendition of the song as it was played in Trinidad in the 1930s:

When the Yankees first came to Trinidad  
Some of the young girls were more than glad  
They said that the Yankees loved them nice  
And they got them a better price

Singers  
"they say"

Chorus  
Rum and Coca-Cola  
On these good islands  
Balls, mothers and daughters  
Working for the Yankee dollar

(Cited in Hall 1993:289)

Rum as a symbol of Caribbean identity is the same way that Coca-Cola represents American culture. The calypso song *Rum and Coca-Cola* captured the mixing of Caribbean and American cultures within the context of prostitution and the heavy U.S. military presence in Trinidad during World War II. *Rum and Coca-Cola* highlights the dichotomies between and intertwining of West Indian and American. Tourism, globalization, and the continuing foreign military presence in the Caribbean have strengthened the construction of a pan-Caribbean identity and elevated rum to the status of cultural symbol.

# APPENDIX A MASTER CONTEXT RECORDS AND ARTIFACT LISTS FROM BACKSIDE CHURCH STREET SITE

Appendix A provides detailed information about the artifacts recovered from each archaeological context at Backside Church Street. The artifact categories listed in the following tables are based on organizational structures developed by Stanley South (PVT). The tables also include a general sketch of burial material recovered from the site.

**Context 1: Nineteenth-Century Clay Loom**

Context 1 is a thin layer of yellowish clay mixed with coral rubble 1 foot thick. The coral rubble largely represents the destruction debris from the late eighteenth-century masonry-coral stone house, which stood upon the site until ca. 1884. Context 1 contained some different masonry and was originally thought to be an eighteenth-century deposit. However, later material, including nineteenth-century pottery, was recovered from the layer. The underlying layer also contained some twentieth-century material confirming the late deposition of Context 1. The layer covered all of the excavated area and probably the entire site.

**Table A.1 Artifacts from Context 1 at Backside Church Street**

Category	Artifact	# of Artifacts
Kitchen	Stoneware stoneware	0
	Shell object postmark	0
	Redware bowl/plant	0
	Dark ware/black and purple bowl	0
	Dark white	0
	Redware, unglazed	4
	Redware with brown slip plant	2
	White bottle plant	0
	Black/Impasto	2
	Corroded stone 15-20 cm	0
Architectural	Corroded stone 15-20 cm	0
	Corroded stone 15-20 cm	0
	Red ware/black and purple bowl	0
	Red ware/black and purple bowl	0
	Red ware/black and purple bowl	0
Furniture	Chair	0
	Window plant	0
Adm.	Table	0
	Table	0

Table A-1 (continued)

Clothing	Green band (wooly)
Personal	n/a
Takeaways	n/a
Automot	n/a
Firearm	Open shell breech-loading rifle Close shell
	Manual, likely p.p.
Unidentified	Iron objects

### Context 1: Thick Layer of Brownish Black Clay

Context 1 is a thick layer of brownish black clay with the look and consistency of chocolate. This soil is found throughout Barbados, especially in sugar cane-growing areas. In the early nineteenth century, traveler and physician George Peckard (1816,183) visited Bridgetown and commented on the soils: "Amongst the Peckard, The soil near Bridgetown 'is of rich black earth, usually spread on a base of volcanic rock, spread of sandstone, and other massive concretions'" Peckard was probably describing the type of soil encountered in Context 1. The soil was nearly impossible to excavate through. It is such a rich soil and often it was simply broken into small bits. Context 1 was very distinct from the other layers and clearly delineated in profile drawings and photographs. The depth of this Context ranged between 5 and 10 cm below the ground surface. It was found in all western pits and appears to have covered the north and west sections of the site. Although the Context contained a large number of ceramic pieces dating to the early nineteenth century, no Eastern Caribbean ceramic ware from 1783 was recovered from Context 1 indicating that it was deposited during the mid-twentieth century. However, lead coins, which are ubiquitous in Barbados, may have penetrated this layer. The site may have fallen in to Context 1 as a result of that disturbance. Context 1 may represent the remains of a proposed dirt floor which have been seen in other historic and colonial properties in Barbados. Context 1 contained pre-twentieth-century North German iron nails and bolts, but also a wide variety of early to mid nineteenth century metalware and manufacturing products. Context 1 also contained a large amount of window glass. The found material was well very preserved.

Table A.2. Artifacts from Context 1 at Backside Church Street

Category	Artifact	# of fragments
Kitchen	Coffin, unceramicized	11
	Coffin, black/white	11
	Coffin, green/blue	2
	Synthetic, North Devon	4
	Black glass tin, possibly locally, possible (Buckleyware)	1
	Enderson, enameled wood (pins, local)	19
	Snowwhite, English towel	2
	Stoneware, Dutch enameled handle	1
	Green bottle glass	12
	Clear drinking glass	2
	White China	9
	Knife ring	1
	Knives	12
	Knives, cutlery/steel	2
Architecture	Paints	9
	Window glass	10
	Shallimaster	5
	Roofing slate	10
	Plank	8
Furniture	n/a	
Arms	n/a	
Clothing	Straw hat	1
Personal	Costume (Canadian memory)	1
Tobacco pipe	Knife pipe bowl	4
	Knife pipe bowl w/ enameled mark	1
	Knife pipe stem, 1764 <sup>2</sup>	10
	Knife pipe stem, 1764 <sup>2</sup>	4
	Knife pipe stem, 1764 <sup>2</sup>	1
Activities	n/a	
Food	Small shell	
	Pig	
	Butt	
	Crab	
	Sea urchin	
	Clam shell/amber pipe	
	Pony rib	
	Meat	
Unclassified	Iron objects, unceramicized	12
	Plank	1

## Context 3, Back, Behind Layer

Context 3 is a nineteenth-century layer of large to heavy colored-organic sandy loam soil. It appears to be a clean deposit, which was cut by Context 1 and Context 5. It appeared in the western half of the 1 m x 1 m unit 100w/100w that was cut 10w/100w. This layer was removed from 1m x 1m unit 10w/100w and in the eastern half of 1m x 1m

and 1886/100 when the cut for Context 3 was made. It also appears very thin in the western half of the area (see 188a/189a) suggesting that the upper portion of the western half of Context 2 was removed during the cut for Context 3. This Context contained relatively few artifacts and may have been deposited quickly.

Table A-3. Artifacts from Context 2 at Backside Church Street

Category	Artifact	# of fragments
Kitchen	Green bottle glass	1
	Green bottle glass, possible	1
	Redware, green/black glass	4
	Redware, unglazed	2
	Redware, green and black speckles	6
	Sanitizing, North Devon	2
	Cliff, white	2
	Clear glass, possible crystal decanter top	1
Architecture	Clay roof	1
	Spoke	1
	Brick	3
Furniture	n/a	
Arms	n/a	
Clothing	n/a	
Personal	n/a	
Yellow pipe	Kaiser pipestem, 1840 <sup>2</sup>	1
Ammunition	n/a	
	Coach shaft, Swedish pipe	
	Pole	
Unidentified	Iron	
	Iron object	1

#### Context 1: Dark Brown Organic Layer

Context 1 is a dark brown, sandy clay organic layer of soil cut by Context 3. It sloped to the north and disappeared at the north half of the area (see 188a/189a). It was not evident in the area (see 188a/189a). It is most clearly visible in the west wall profile drawing. Artifacts recovered from this Context all dated to the seventeenth century.

Table A-4. Artifacts from Context 1 at Backside Church Street

Category	Artifact	# of fragments
Kitchen	Sanitizing, North Devon	2
	Redware, green and black speckles	1
	Redware, plain lead glaze	3
	Green bottle glass	4
	Redware, unglazed	20
	Cliff, white	2
	Cliff, blue and white floral design	1
	Cliff, unidentified	2
	Cliff, white interior w/ speckled purple exterior	1

Table 4-4 (continued)

Accidentals	Coral stone	1
	Brick	14
	Splines	1
	Window glass	1
Turnstone	n/a	
Arch	n/a	
Chimney	n/a	
Personal	n/a	
Telecommunications	Kuonin page boards	1
	Kuonin page stones, 40x60 <sup>o</sup>	1
	Kuonin page stones, 10x10 <sup>o</sup>	10
	Kuonin page stones, 10x4 <sup>o</sup>	1
Activities	Game pieces: modified stone (shapeless of cylinders)	1
Found	Czech shell (beach) paper	
	Large mammal	
	Cord	
	Flint	
	New window	
	Brick	
	Iron objects	1
Undescribed	Copper objects	1
	Ammonite pottery (empty convex profile shards)	10

## Context 21: Yellow Blot and Yellow Lines (Hilgiposkila, northern Järviselkä islands)

Context 1 and Context 21. It is on Context 1 and Context 11 and may have been a rubber's track. It had a distinct profile, including straight-sided walls on the east and west side of east face, 1 m east 100x100w. The edges aligned with the north-south-southeast (southeast) Context 11 and the north-south-southeast orientation (Context 21). The Context comes and very little cultural material: only beach fragments, shells, and some found common

## Context 2: Blue Light Brown Layer

Context 2 is a thin light brown organic sandy layer, possibly a short deposit, cut by Context 3 and Context 11. It only appears on the western half of face, 1 m wide 100x100w and 1 m x 1 m north 100x100w. It gradually disappears in the north portion of 1 m x 1 m east 100x100w. Context 2 contained relatively little cultural material.

Table 4-4: Artifacts from Context 2 at Børkasko/Chapin Street

Category	Artifact	# of fragments
Kitchen	Twist, ribbon	1
	Spoon/Box, North Devon	1
	Green bottle glass	1
	Beakers, inground	1

Table 8.3 (continued)

Architectural	Coral stone	0
Furniture	Chair back, copper	0
Arms	n/a	
Clothing	n/a	
Personal	n/a	
Tools/equipment	n/a	
Accessories	Coral pieces (possibly for jewelry, small black beads, stones)	4
Household	Charcoal	
	Large mirror	
Decorated	Iron object	0
Associations	Assumed to be pottery	0

### Context 15: Seventeenth-century foundation

Context 15 is a seventeenth-century coral stone foundation. Excavated in 1995 and subsequent disturbance by residents of Hall's Alley destroyed portions of Context 15. Only one course of coral stone was recovered suggesting that underlying courses of coral stone were ridded-out after the demise of the original structure (Figure 44). It is also conceivable that these stones represented the foundation for a small wooden structure. The presence of the foundation within Context 11 and below Context 9 clearly indicates a seventeenth-century construction. Few of the coral stone were flattened to the size and shape of clay bricks. Many had jagged edges, which is common in Barbadian coral rubble and mortar building construction. No cultural material was recovered from the foundation and its surrounding soils.

### Context 16: Thirteenth-century coral stone wall

Context 16 is a low and thin coral stone wall, which probably represented the remains of a non-structural interior wall or pillar. It appears to have originally abutted the coral stone foundation (Context 15). The bottom course of stone was an immediately re-upt of Context 15 and suggests that it was built sometime during, or shortly after, Context 11 was deposited. As with the seventeenth-century foundation, the stones were 15–20 cm thick and only one course of stone represented the width and thickness of the wall. It was 40–60 cm high and, although no cut were made in the underlying layers, coral formed an underlying layer. The wall was at least 3-meters long without any breakage gaps. The stones were purposefully oriented or flattened, except one. The face of the stones on the



south side of the wall was smooth and flat, but the stones appeared to be original within this form on the northern face. The smoothing and purposeful placement of these stones suggests that the smooth south side of the wall may have been the face of a low interior roller wall – which was on the northern half of the house closest to Backside Church Street. However, it is also possible that the dwelling originally ran further back from Backside Street and the wall was the smooth exterior facade that actually faced Backside Church Street.

#### Context 1.1: Jack, Laura, Sandy (Late to mid-nineteenth Century House Owners)

Context 11 is a thick brown soil-organic layer – it probably represents the latest period of Australian settlement and earliest period of European settlement on Backside. The deep soil-organic nature of soil suggests it may have been the original swampy or swampy marsh upon which Backgrove was built. The top portion of Context 11 represents a nineteenth century stratigraphic. The lower portion is composed of Australian materials representing the entire range of Backside – prehistoric settlements. Other than the subjectiveness, there is no distinct break in the stratigraphy between the prehistoric and historic period, which further supports the argument that this layer represents the original surface at the time of European settlement. Context 11 is under by Context 12 (a possible earlier street) and by Context 13 (a second more localised one). A large number of Australian pottery fragments were recovered from the lower portions of Context 11. The 100 cm and 100 cm was excavated to 145 cm below the ground surface. We ended excavations at 145 cm because we hit the water table. Below 145 cm, Context 11 was full of Australian material but changed to historic material. This was the only soil excavated to this depth. We excavated the upper historic period sections of Context 12 at the remaining date.

Table A-4: Analysis from Context 11 at Backside Church Street (see also Appendix B)

Category	Artifact	# of Artifacts
Pottery	Other	301
	Synthetic, Plastic Goods	95
	Manufactured objects	9
	Stoneware	24



# **APPENDIX B MINIMUM VESSEL COUNTS FROM CONTEXT II AT BACKSIDE CHURCH STREET AND JAMESTOWN STRUCTURE 115**

Appendix B provides detailed information about the ceramic and glass artifacts recovered from Context II at Backside Church Street and Jamestown Structure 115. The vessel types and functional categories listed in the following tables are based largely on organizational structures developed by Anne Yonck (1990:18) and Mary Bouillon et al. (1982). Minimum vessel counts are based on rim-to-heel base sherds, as well as surface decorations.

## **Context II, Backside Church Street, Barbados**

Table B-1 provides detailed information about glass and ceramic artifacts recovered from Context II at Backside Church Street in Bridgetown, Barbados. The minimum vessel analysis was conducted at the archaeology laboratory at the University of the West Indies, Cave Hill, Barbados in 2000.

**Table B-1 Minimum vessel counts from Backside Church Street**

<b>Vessel Type</b>		<b>Functional category</b>
<b>Glass: wine bottles</b>		
Wine bottle (found on rim sherd)		W
Wine bottle (found on rim sherd)		W
Wine bottle (found on rim sherd)		W
Wine bottle (found on rim sherd)		W
Wine bottle (found on rim sherd)		W
Wine bottle (found on rim sherd)		W
Wine bottle (found on rim sherd)		W
Wine bottle (found on rim sherd)		W
<b>Ceramics</b>		
Clear drinking glass		W
<b>Other</b>		
Panck bowl	White, well defined foot ring	W

Table B-1 (continued)

Peach/rose	White, dusky pointed, well defined foot ring	SDet
Peach/rose	White, dusky pointed, four diameter	SDet
Peach/rose	Blue/white, flat base, straight, solid, possibly a ring to gallery jet	SDet
Peach/rose	Blue/white, Chinese front pattern, pleasant edge	SDet
Peach/rose	Blue/white, foot ring	SDet
Peach/rose	Blue/white, finger impressed rim	SDet
Peach/rose	Green/blue/white, dorsal deep	SDet
Peach/rose	White, slightly flared lip, possibly glaucous	SDet
Peach/rose	White	SDet
Peach/rose	Blue to black white, well defined foot ring	SDet
Peach/rose	White with brown rings, wide lip	SDet
Peach/rose	Black/white	SDet
Peach/rose	Blue/white with soft greenish tint to exterior	SDet
Peach/rose	Black/white	SDet
Peach/rose	Blue/white Chinese sea pattern	PCa
Peach/rose	Blue/white, Chinese pattern, dusky pointed, possibly lead plate on exterior bottom	PCa
Peach/rose	Black, darker blue band around rim	PCa
Pink	Blue/black blue/black, Chinese pattern, red pore	PCa
Pink/rose	White	PCa
Pink/rose	Purple band on white	PCa
Pink/rose	White/rose	PCa
Pink/rose	Blue/white	PCa
Pink/rose	Blue/white	PCa
Pink/rose	Blue/white	PCa
Pink/rose	Green/white	PCa
Pink/rose	Black/white	PCa
Pink	Blue/white	PCa
Pink/rose	Blue/white front pattern	PCa
Pink/rose	White, dusky pointed	PCa
Pink/rose	White, dusky pointed	PCa
Pink/rose	Blue/white, dusky pointed	PCa
Pink/rose	White with lead glass bottom	PCa
Pink/rose	Blue/white	PCa
Pink/rose	White	PCa
Pink/rose	Blue to black white, dusky pointed	PCa
Pink/rose	Blue/white	PCa
Pink/rose	White	PCa
Pink/rose	Blue/white	PCa
Pink/rose	White	PCa
Pink/rose	Black/white Chinese pattern	PCa
Red	White, flat base, four diameter	FDet
Red	White, dusky pointed, four diameter	BCa

Table B-1 (continued)

Mag	White, thinly potted, form dominant	BCo
Mag	White, flat heads, straight-sided	BCo
Mag	Blue, Chacoan pattern	BCo
Mag	White, thickly potted, not potted	BCo
Mag	Black white	BCo
Cup	Black/white, thinly potted	BCo
Cup	Black/white, thinly potted	BCo
Cup	White, thinly potted, heads, straight-sided, form dominant	BCo
Cup	Black/white, Chacoan head pattern, thinly potted, flat cup	BCo
Cup	Polychrome, red, blue, green on white	BCo
Cup	Black white, thinly potted	BCo
Cup	White	BCo
Bowl	White, thickly potted	PS
Bowl	White, flared lip	PS
Chamber pot	Black white, flared lip, flat and handle	n.s.
Chamber pot	White, flared lip, possibly flat	n.s.
Pharmaceutical	Blue (a sort of white blue)	n.s.
Pharmaceutical	White, small bowl	n.s.
<b>North Devon Signifies</b>		
Patch bowl	Black/pinkish, potted lip, flat rim, unglazed rim or form deep, 20mm diameter	BCot
Patch bowl	Little design, globular, flat rim, smooth lip, unglazed interior, form deep, 1 form diameter	BCot
Patch bowl	Little design, plain yellow except for signifier, head unbroken, form deep, form diameter	BCot
Patch bowl	Possibly deep dish	BCot
Patch bowl	Plain yellow or green head	BCot
Patch bowl	Plain straight-sided, form diameter	BCot
Patch bowl	Blue fragment	BCot
Patch bowl	Blue fragment	BCot
Patch bowl	Blue fragment	BCot
Patch bowl	Thinly potted	BCot
Bowl	Globular	BCo
Bowl	Blue fragment	BCo
Bowl	Blue fragment	BCo
Bowl	With handle on rim	PS
Bowl	Thinly potted	PS
Bowl	Flared lip, possibly deep dish	PS
Bowl	Flared lip, possibly deep dish	PS
Bowl	Blue fragment, possibly deep dish	PS
Patch bowl	With handle	BCot
<b>South Devon Signifies</b>		
Patch bowl	Flat rim, yellow, unbroken rim diameter	BCot

Table B-1 (continued)

Dark	Large, pointed edge, unnotched dip; possibly a bowl	FD&T
Dark	Large, yellow; no lateral dip; possibly a bowl	FD&T
<b>Stemware</b>		
Mug	Widermouth	BCs
Mug	Widermouth; pronounced flange	BCs
Mug	Widermouth, thickly potted	BCs
Mug	Widermouth, thickly potted	BCs
Bottle	Bow made; thick about; possibly Dutch	BCs
Bottle/mug	Large hollow; 100+ dm; 20+ mm; 10+ mm; largest; cylindrical base	BCs
Bottle/mug	Small; 1 dm wide; 10+ mm high, unnotched	BCs
Bottle/mug	10+ dm; cylindrical base	BCs
Bottle/mug	Cylindrical base	BCs
Bottle/mug	Cylindrical base	BCs
Bottle/mug	Cylindrical base	BCs
Bottle/mug	Cylindrical base	BCs
Bottle/mug	Cylindrical base	BCs
Bottle/mug	Cylindrical base	BCs
<b>Flank Glass: Pans and flat glass; nothing more</b>		
Bowl	Thin; deep; rim	FD&T
Bowl	Thinly potted	FD&T
Bowl	Thin; deep; rim	FD&T
Bowl	Large; thick	FD&T
Dark	Large; thick; wrong; dark w/ pronounced feet	FD&T
Dark	Large	FD&T
Bottle	1 dm; fragment	BCs
Pan	Large; thick	FDs
Bowl	Large; thick; with possible lid	FDs
Bowl	Large; thick; with possible lid	FDs
<b>Flank Glass: Green; long and</b>		
Bowl	Large; thick; wide; rim	FD&T
Plyon	Barrel; bottom	FDs
Plyon	Barrel; bottom	FDs
Plyon		FDs
Plyon		FDs
Orange pt	Orange; purple	FDs
Plyon		FDs
<b>Unfinished material</b>		
Bowl	Large; flat; possibly locally made; thickly potted	FD&T
Bowl	Thinly potted; possibly locally made; unnotched mm; 14+ mm diameter	FD&T
Bowl	Thinly potted; possibly locally made	FD&T
Bowl	Thinly potted; possibly locally made	FD&T
Bottle	Thin; fragment only	BCs

Table B-1 (continued)

Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar, less fully formed	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Storage jar	Large, thick vessel, possibly sugar mold or molasses dip jar	PSt
Procedure		
Cap	Undeclared, possibly Chinese	BC's
Mug	Undeclared, possibly Chinese	BC's
Food/tea bowl		
Food bowl	Marbled decoration	BCOut
Plate	Sprinkle-type, deep	BC's
Olive jar		
Storage jar	Sprinkle, no entrance glass	PSt
Cover, white, likely covered food glass over red body		
Food/tea bowl	Elms decoration, possibly French flower	BCOut
Cover food glass, light yellow with red entrance, half body		
Food/tea bowl	Thinly painted, light yellow	PStOut
Lead glass over dark red body (looks almost black)		
Mug	Thinly, dirty painted	BC's
Lead glass over red dip or half body (looks almost black)		
Mug	1 finger	BC's
Cover food glass over red body (looks almost black)		
Storage	Thin entrance type, possibly storage jar	PSt

### Structure 115, Juncosville, Virginia

Table B-2 provides detailed information about glass and ceramic artifacts recovered from Structure 115. This material was excavated in the 1980s under the direction of John Omer (1984). The ceramic vessel analysis was conducted at the Jamestown Island Museum collection in 2000.





Table B-1. (continued)

Fireplace tile		N/A
Flank Drive signets		
Board		PC2a
Board		PC2a
Board	Painted	PC2a
Flare	Thinly pointed	PC3
Green heat placed underneath (half in and half with unplaced material)		
Board/join	Flat bottom, closed top, straight sided, 4 inches high	PC1
Board/join	Well defined top	PC2
Foot	Straight sided with flat bottom	PC1
Board		PC1
Board		PC1
Flaking pan	Square or rectangular pan with straight sided top	PC1
Board		PC1
Board		PC1
Board	Circular	PC1
Unplaced material on		
Storage pan		PC1
Board		PC1
Flange	Foot only	PC1
Insulation		
Mag	Polystyrene	PC3
Mag	Widerwall on robot	PC3
Mag	Widerwall with robot	PC3
Mag	Widerwall with robot	PC3
Mag	Widerwall people	PC3
Board	Widerwall	PC1
Board	Board	PC1
Board	Board handle	PC1
Board	Polystyrene	PC1
Board	Polystyrene	PC1
Yellowish clear heat glass over half colored body		
Storage pan		PC1
Storage pan		PC1
Board		PC1
Board		PC1
Insulation		
Deck		PC2d
Flank Drive gravel impregnated		
Foot	Square or rectangular 2 inches deep, w/ handle and finger impregnated on edge	PC1
Foot	Large round pan or jar placed on handle only	PC1
Jar	Unplaced top of bowl from waste rather than not	PC1
Flange	Handle only, handle top straight for only one finger	PC2a

Table B-2 (continued)

Clear tint glass (not tinted body)

Jar		PS
Pan	Deep	PS
Dish	Deep	PSd

Greenish and yellowish glass (no exterior and interior)

Storage jar	Thick cylindrical	PS
Bowl	Large	PS
Pottery	Wide foot	PS

Table B-3 (continued)

Bowl	Small	PS
Bowl	Greenish yellow	PS
Bowl	Greenish yellow	PS
Bowl	Greenish yellow	PS
Platter	Handle with foot body	PSd

Black/grey ware (black glass coated body)

Storage jar	Thick cylindrical	PS
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Key

PS = Food Storage

PSd = Food Dish/plate

PS = Food Consumption...

BS = Beverage Storage

BSd = Beverage Dish/plate

BC = Beverage Consumption

## GLOSSARY

AA	<i>J. Alister Anderson</i> , University of Florida, Latin American Collection, microfilm.
DMB	Barbados Ministry of Health, annual report of the chief medical officer.
BLB	Bridgetown Levy Records, Barbados Archives (Black Book, Barbados).
CO	British Colonial Office Reports, University of Florida, Latin American Collection, microfilm.
CR	Colonial Williamsburg Foundation collection, Williamsburg, Virginia.
CHC	Chroniques et Historique de la Caraïbe, 1611-1614, pp. 1014.
GMP	Gale-Morson papers, University of Florida, Latin American Collection, microfilm.
HC	House of Commons papers, University of Florida, Manuscripts, microfilm.
HP	Hamwood papers, University of Florida, Latin American Collection, microfilm.
JMHMS	Journal of the Barbados Museum and Historical Society.
JNFA	Inter-American Planning Agency, economic and social survey of Jamaica, University of Florida, Latin American Collection.
SCF	Robert Carter papers, Colonial Williamsburg Foundation Library, Williamsburg, Virginia.
SMF	Records of the St. Michael Society- Journal of the Barbados Museum and Historical Society.
SPG	Society for the Propagation of the Gospel in Foreign Parts, Codrington plantation records, Barbados records.

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## BIOGRAPHICAL SKETCH

Frederick B. Smith began his interest in historical archaeology at George Mason University, Fairfax, Virginia, where he received a Bachelor of Arts degree in Anthropology. After receiving his degree, Smith began working for a Cultural Resource Management firm in Washington DC. He excavated sites in the Chesapeake and the Mid-Atlantic United States. In 1991, he worked on a major Amerindian settlement site in the U.S. Virgin Islands, which inspired him to pursue further research in the Caribbean. In 1992, Smith entered the Master of Arts program in Anthropology at the College of William and Mary, Williamsburg, Virginia. At William and Mary, he studied historical archaeology and surveyed sites in San Juan and Bermuda. In 1996, Smith began working for the Department of Archaeological Research at the Colonial Williamsburg Foundation, where he implemented and conducted excavations in the Chesapeake and refined his archaeological skills. He received his Master of Arts degree in anthropology in 1994. The same year, he married his long time friend and companion Jane Wolf. He also entered the Anthropology Department at the University of Florida, where he pursued his Ph.D. He continued to focus on historical archaeology of the Caribbean. In 1998, he began excavations in Barbados with his colleague Karl Wilson from the University of the West Indies. Since 1998, Smith has traveled to Barbados nine times and conducted excavations at urban and plantation sites in the island. On March 1, 2021, Jane gave birth to a beautiful baby girl.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy

  
Barbara A. Dwyer, Chair  
Disseminated Research Division of Anthropology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy

  
David P. Grogan, Chairman  
Professor of History

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy

  
Robert J. Smith  
Associate Professor of Anthropology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy

  
Harry Paul  
Professor of History

I read [Title] and this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy

  
Stanley B. Glenn, Jr.  
Research Professor of Anthropology  
College of William and Mary

This dissertation was submitted to the Graduate Faculty of the Department of Anthropology in the College of Liberal Arts and Sciences and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy

December 2004

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Dean, Graduate School